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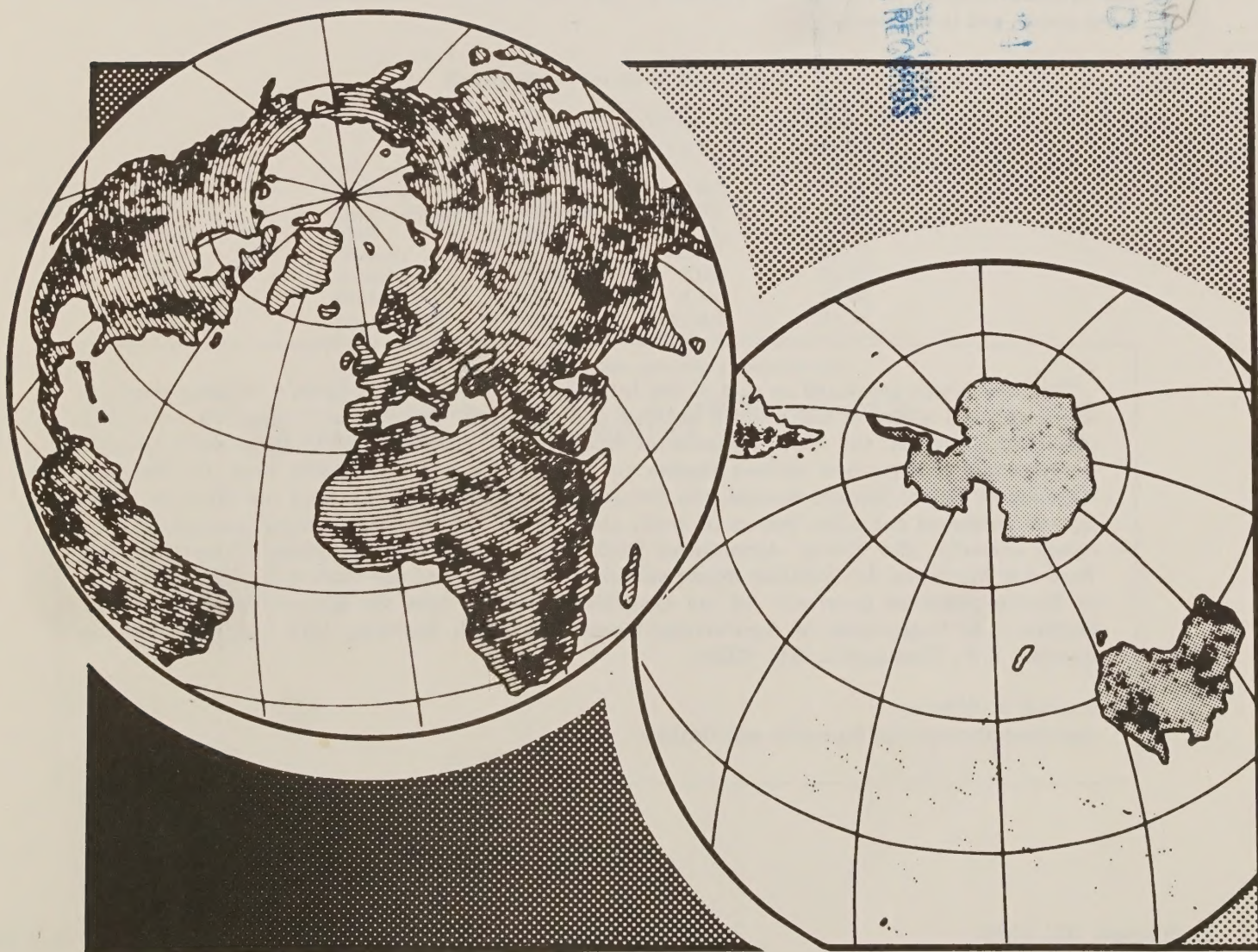
United States  
Department of  
Agriculture

Economics and  
Statistics  
Service

Supplement 3 to WAS-24

# Agricultural Situation: Eastern Europe

Review of 1980 and Outlook  
for 1981



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## ABSTRACT

In 1980, total agricultural production declined approximately 3 percent from the 1979 level. Producer prices increased, but retail food prices remained constant for most products and government subsidies increased. Poland and Yugoslavia were exceptions, and increases in meat prices in Poland led to the formation of the Solidarity trade union movement. Wheat and oilseeds production increased, but corn, sugarbeets, potato and tobacco production fell. Total meat production was down one percent. Plans call for a slow agricultural growth rate in 1981 with crop production increasing faster than livestock production. U.S. agricultural exports in 1980 were a record at \$2.3 billion; the outlook is for slightly higher exports in 1981.

**KEYWORDS:** Eastern Europe, plans, weather, crops, livestock, trade values, agricultural trade, agricultural policy, and investment.

This report was generated as part of the International Economics Division's on-going program of agricultural situation and outlook analysis and reporting. The program's regularly scheduled publications include: the *World Agricultural Situation and Outlook* published three times annually; regional situation and outlook reports on Asia, Africa and the Middle East, the People's Republic of China, Eastern Europe, the Soviet Union, Western Europe, and the Western Hemisphere published annually; indices of world and regional food and agricultural production published annually; the *Foreign Agricultural Trade of the United States* published bi-monthly; the *Food Aid Needs and Availabilities Report* published quarterly; and the *Outlook for U.S. Agricultural Exports* published quarterly. All are available on request from the Economics and Statistics Service, U.S. Department of Agriculture, Room 0054 South Building, 14th and Independence Avenue, S.W., Washington, D.C. 20250.

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## TERMS AND MEASURES

### Terms

Agricultural land—Cultivated land, gardens, orchards, meadows, and pastures.

Agricultural trade—Raw materials for food and fiber; feeds; and food and food products.

Council of Mutual Economic Assistance (CEMA): Bulgaria, Cuba, Czechoslovakia, German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, USSR, and Vietnam.

Eastern Europe:

Northern countries—Czechoslovakia, GDR, Poland.

Southern countries—Bulgaria, Hungary, Romania, Yugoslavia.

Transshipments—United States exports destined to Eastern Europe unloaded in Canada or Western Europe and reported by the U.S. Census Bureau as exports to the port of entry.

### Units

Metric units are used throughout:

One metric ton = 2,204.6 pounds

One quintal = 100 kilograms

One kilogram = 2.2046 pounds

One hectare = 2.471 acres

### Conversion factors

Cowhides: one piece = 22 kilograms

Milk: one liter = 1.031 kilograms

Soybeans: one unit = 79.5 percent soybean meal equivalent, or 18.0 percent soybean oil equivalent.

### Exchange rates as of July 1980

Country		Official rate per U.S. \$ <sup>1</sup>	Tourist rate per U.S. \$
Bulgaria	Lev	0.86	21.31
Czechoslovakia	Korunas	5.30	9.54
GDR	Marks	3.11	1.90
Hungary	Forints	32.24	22.55
Poland	Zlotys	3.05	33.20
Romania	Lei	4.47	12.00
Yugoslavia <sup>3</sup>	Dinar	27.34	27.34

<sup>1</sup>Official rate used for foreign trade accounting purposes only.

<sup>2</sup>Tourist rate as of June 1979.

<sup>3</sup>Yugoslavia devalued the dinar in June 1980. The previous official and tourist rates were dinars 18.44 per U.S. \$.



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## FOREWORD

This report reviews and analyzes major developments in the food and feed sectors of Eastern Europe during 1980 and provides information on the outlook for 1981. Emphasis is on those commodities where developments in Eastern Europe can be expected to influence the demand for imports, particularly those supplied from the United States.

The report updates and supplements data found in Supplement 3 to WAS 21, *Eastern Europe Agricultural Situation, Review of 1979 and Outlook for 1980*. It is one of seven regional publications on the world agricultural situation.

Thomas A. Vankai directed and coordinated preparation of this report. Sections were written by Edward Cook, Robert Cummings, and Thomas A. Vankai. Joe Doyle assisted in the compilation of statistical data. The manuscript was prepared for publication by Pat Reed and Jane Souders. Information submitted by the U.S. Agricultural Attaches in Belgrade, Berlin, Bucharest, Vienna, and Warsaw is acknowledged with appreciation.

Unless otherwise indicated, the statistical data given in the tables of this report were taken from the statistical yearbooks of the respective countries or from the yearbooks of the Council for Mutual Economic Assistance. Data on Albania are so scarce that Albania is not covered in this report.

Any comments, suggestions, or questions concerning this report should be addressed to Eastern Europe and USSR Branch, International Economics Division, Economics and Statistics Service, USDA, Room 314, 500 12th Street, S.W., Washington, D.C. 20250. Phone (202)447-8380.

Anton F. Malish, Chief  
Eastern Europe and USSR Branch  
International Economics Division

Country	Land		Socialized : Population:		Labor force 2/		GNP 2/	
	Total	: Agricul- : : tural : Arable	: Agricul- : : tural : land 1/	: mid- : : year 2/	Total	: Agricul- : : tural 3/	Total	: Per : : capita
		-- 1,000 hectares --	Percent	----- Millions -----			Billion	
Bulgaria	11,091	6,206	99	8.8	4.73	1.23	26.7	3,030
Czechoslovakia	12,788	6,924	94	15.2	7.60	1.10	76.6	6,040
GDR	10,833	6,280	94	16.7	8.93	0.86	89.1	5,340
Hungary	9,303	6,651	93	10.7	5.23	1.02	35.7	3,340
Poland	31,268	18,991	32	35.2	19.33	5.90	119.1	3,380
Romania	23,750	14,967	91	22.0	12.07	4.40	78.9	3,590
Yugoslavia	25,580	14,241	30	22.2	8.85	4/3.32	64.4	2,900
Total	124,613	74,260	--	130.8	66.74	17.83	490.5	3,750

1/ In terms of ownership.

2/ Handbook of Economic Statistics, 1980, Central Intelligence Agency. GNP figures are in 1979 dollars.

3/ Includes self-employed farmers.

4/ World Bank data.



# AGRICULTURAL SITUATION: EASTERN EUROPE

## Review of 1980 and Outlook for 1981

### SUMMARY

Total agricultural production in Eastern Europe during 1980 declined approximately 3 percent from the 1979 level. Production declined in Bulgaria, Poland, Romania, and Yugoslavia. Short supplies, artificially low prices, and high consumer demand resulted in sporadic food shortages in all countries except in Bulgaria and Hungary. Polish agriculture was particularly hard hit as very poor weather and floods reduced output to the lowest level in a decade.

Higher input costs throughout the region led to selective producer price increases for agricultural products. Only Poland and Yugoslavia attempted to pass the higher producer prices on to consumers while the other countries increased subsidies to maintain retail price stability. Increased retail food prices in Poland sparked a series of summer strikes leading to the formation of the Solidarity trade union movement. Tight meat and sugar supplies and consumer resistance to higher prices caused the Polish government to reinstate sugar rationing in the summer of 1980. Meat rationing began on April 1, 1981. Growing uncertainty about Poland's political situation compounded a very poor agricultural year, resulting in significant food shortages by early spring 1981.

Private farming was generally strengthened throughout the region via various government actions. Although the Polish Supreme Court ruled against the creation of a rural union for Polish farmers, the Polish Parliament later enacted legislation permitting the registration of Rural Solidarity.

Capital investment in 1980 declined in Hungary and Poland and rose by 2 percent or less in Czechoslovakia, the German Democratic Republic (GDR) and Yugoslavia. Use of fertilizers in Eastern Europe rose less than one percent. High import costs for fertilizer and fertilizer raw materials, scarce investment funds, and a regionwide emphasis on modernization rather than expansion of the chemical fertilizer industry all served to constrain fertilizer output and use.

The region's balance of trade deficit declined in 1980 while net hard currency debt increased to an estimated \$73 billion from \$63 billion in 1979. The agricultural trade balance of Eastern Europe remained negative.

For the second year in a row, U.S. agricultural exports to the region were a record. In 1980 they were valued at \$2.3 billion. U.S. agricultural imports from Eastern Europe declined slightly. In fiscal 1980 (Oct.-Sept.), CCC credit use by eligible East European countries increased 11 percent over the FY 79 grants to \$643 million. Credit guarantees replaced most of the direct credit grants.

Total grain output in 1980 was 96 million tons, 5 million above 1979's poor harvest and slightly above the

1978 record. Corn production was lower in all countries due to lower yields and a decline in area sown. Wheat output rebounded from the disappointing 1979 harvest, increasing 7 million tons. The quality of the 1980 crop was poor with a generally high moisture content. Grain imports during the July-June 1979/80 marketing year are estimated at 17 million tons--2.4 million tons above the previous year. The United States doubled its grain exports to the region over 1978/79 levels and provided more than two-thirds of East European grain imports.

Higher area planted to oilseeds led to record production of 3.9 million tons in 1980. Rapeseed production nearly doubled over 1979's very poor harvest to 1.26 million tons. However, soybean production, at 650,000 tons, was disappointing. Imports of oilmeal (including meal equivalent of seeds and fishmeal) rose 8 percent to 5.57 million tons. The United States was the primary supplier, with oilmeal-equivalent exports of 2.3 million tons.

Sugarbeet production in 1980 was 40.6 million tons, the worst harvest since 1973. A cold spring and wet summer reduced beet yields and sugar content. Poland accounted for much of the decline. Because of the poor crop, Eastern Europe will be a net importer of sugar in 1981.

The East European potato harvest in 1980 was the lowest since World War II. The poor crop will have serious consequences for the livestock sector in Poland where potatoes are an important livestock feed.

Tobacco production at 346,000 tons was 7 percent below 1979's production. A poor Bulgarian harvest and tobacco blight in Yugoslavia accounted for the decline. Fruit and vegetable production was down in the region and the quality of both crop groups was poor.

Livestock inventories declined slightly in 1980 throughout the region due to inadequate feed supplies. Total meat production in Eastern Europe fell 2 percent with beef production falling 4 percent.

The East European economy will grow at a slower rate in 1981 than in 1980. Agriculture in most countries will get priority treatment in investment allocation but planned total investment in 1981 is to decline in Poland, Hungary, and Yugoslavia and remain steady in the other countries. There will be a slight shift toward grains and industrial crops production at the expense of forage crops. Livestock inventories are to be stabilized in Czechoslovakia, the GDR, and Hungary and regionwide emphasis will continue to be placed on reducing costly feed imports.

Further improvement in the overall balance of trade for 1981 will depend on the success of export promotion and import substitution policies in all countries. But,



the agricultural trade balance of the region will remain negative in 1981. The value of U.S. agricultural exports to Eastern Europe for FY 81 is estimated at \$2.4 billion and will once again be dominated by grains,

oilseeds and oilseed products. For FY 1981, Poland has received the largest-ever grant of CCC credit guarantees to one country in a single year—\$670 million.

## ECONOMIC PERFORMANCE SLOWER THAN PLANNED; FOOD SHORTAGES REPORTED

Based on the principal performance indicators, the economic growth rate in 1980, as in 1979, was slower than planned. National income declined in Poland; industrial production declined in Hungary; and agricultural production declined in Bulgaria, Poland, Romania, and Yugoslavia. Total agricultural production in the region declined about 3 percent and remained below the 1978 level. In Poland, production was the lowest in a decade.

Capital investment declined in Hungary and Poland and increased 2 percent or less in Czechoslovakia, the GDR, and Yugoslavia. A larger share of national income was spent for consumption than in 1979. Per capita real income was unchanged in Hungary, and declined in Yugoslavia. The heavy subsidization of retail food prices continued. Rapid growth of monetary income generated an increased demand for the subsidized stable-priced food.

Across much of Eastern Europe, the supply of food did not keep up with demand. Chronic food shortages occurred in Poland and sporadic shortages in Czechoslovakia, the GDR, Romania, and Yugoslavia. Some shortages were caused by temporary hoarding or poor distribution and involved only certain cuts of meats. In addition to meat, vegetable oil and sugar were scarce in Yugoslavia; vegetable oils, milk, eggs, onions, potatoes, and cheese were often short in Romania. The food supply, however, has been the worst in Poland. Sugar rationing, in effect for a few years, was temporarily abandoned but reinstituted in the summer of 1980 and the rations were reduced in 1981. Meat rationing began on April 1.

In Warsaw, western correspondents carried reports of certain city markets without meat, milk, flour, cheese, cold cuts, lemons, potatoes or cabbage, rice or macaroni,

**Principal plan indicators, Eastern Europe,  
1980 and 1981**

Item	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia
<i>Percent increase</i>							
National income							
1980 plan	5.7	3.7	4.8	3-3.5	1.4-1.8	8.8	5.0
1980 actual <sup>1</sup>	5.7	3.0	4.2	1.0	-4.0	2.5	2.5
1981 plan	5.1	2.8	5.0	2-2.5	-3.7	7.0	3-3.5
Industrial production							
1980 plan	6.3	4.0	4.7	3.5-4.0	3-4.2	11.5	6.0
1980 actual <sup>1</sup>	5.0	3.2	4.7	-2	0.9	6.5	4-5
1981 plan	5.6	2.7	5.0	3-3.5	0	8.1	4.0
Agricultural production							
1980 plan	3.7	7.2	<sup>2</sup> 0.5	5-5.5	3.3	4.7-6.0	3
1980 actual <sup>1</sup>	-2.4	6.0	NA	4-5	-9.6	-5.0	-2
1981 plan	4.7	2.6	<sup>2</sup> 0.8	3	8.0	9.0	4
Capital investment							
1980 plan	4.9	2.4	0	-5-(-4)	-9.2	4.9	6
1980 actual <sup>1</sup>	12.8	1.2	2.0	-8	-19.0	3.2	1
1981 plan	3.7	0	NA	-10	-15.0	0	-5
Per capita real income							
1980 plan	3.0	2.2	<sup>3</sup> 4.0	0	1-1.3	9.6	NA
1980 actual <sup>1</sup>	2.7	NA	<sup>3</sup> 2.8	0	NA	NA	-8.1
1981 plan	3.1	<sup>4</sup> 1.7	<sup>3</sup> 4.0	1	NA	3.4	1-1.5

<sup>1</sup>Preliminary.

<sup>2</sup>Agriculture and food industry combined.

<sup>3</sup>Monetary income.

<sup>4</sup>Growth of wages.

NA= Not available.



or coffee.<sup>1</sup> The extreme shortages, however, seemed localized, and probably represented problems in distribution and a consumer reaction to the possibility of a general strike. Nevertheless, the situation appeared more than transient, and on March 27, the Polish wire service reported:

## WEATHER FAVORS FALL-SOWN CROPS; SPRING-SOWN CROPS SUFFER

Precipitation and temperature throughout Eastern Europe adversely deviated from long-term averages in each month of the 1979/80 growing period. Reversing the previous year's pattern, the weather was more favorable to fall-sown than to spring-sown crops. The dry fall favored timely completion of planned sowing. The dry conditions, however, slowed germination and emergence, but plentiful November rains remedied the situation. The winter was mild and the crops survived in good condition.

Precipitation in March was above average in the southern countries; in April it was above average in the whole region. Temperatures were below average in April, and were the coolest in a decade in May. The cool and wet conditions retarded spring sowing and the develop-

Due to the fact that food supplies have been inadequate for a long time and due to panic buying, the shelves in Gdansk Voivodship are virtually empty. The Voivodship office has decided to extend rationing. From April 1 coupons are being introduced for animal and vegetable fats.

ment of vegetation. Excessive amounts of rain fell in June and July, causing flooding in many countries. Poland was most seriously affected when a total of 1.7 million hectares was flooded at one time or another. Meadows, pastures, sugarbeets and potatoes sustained the most damage.

The delay in spring cultivation and crop development evoked a chain reaction of late harvests in summer and fall, and late sowing in fall. Because of late ripening, some corn, sugarbeets, and potatoes were still unharvested in November. A freeze early in November followed by heavy rains prevented the completion of the harvest until January.

## GRAIN PRODUCTION RECOVERS

The estimated 96 million tons of grain produced in Eastern Europe in 1980 was slightly above the 1978 record and exceeded the 1979 crop by 5.6 million tons (table 1). Fall-sown crops accounted for most of the increase. Except for Bulgaria, all East European countries reported larger grain production in 1980 than in 1979. Wheat production was higher in the region, but corn production was lower in 1980 than in 1979 in all countries. Wheat yields were high while corn yields were below average, just opposite the year before. Wheat output exceeded the disappointing 1979 results by approximately 7 million tons.

Total grain area remained practically unchanged at close to 29 million hectares for the third straight year despite governmental policies encouraging expansion (table 2). A record wheat yield of 35.8 quintals/ha. contributed significantly to the increase in total grain output (see chart below). The use of new high-yielding, disease-resistant seeds and improved cultivation techniques helped obtain the good results. No significant changes in the use of fertilizer or plant protection agents were reported. The decline in corn production was primarily weather-related, but the area sown to corn also declined by 288,000 hectares. Corn area declined the most in Hungary, where in 1979 some corn replaced wheat in the cropping pattern.

While total grain production in the region was good, quality was a problem. Both small grains and corn were

harvested with higher-than-average moisture content. A large volume of the grain had to be dried. Losses during drying and storage are expected to be above normal and the food and feed value of grains is expected to be below normal. While most East European countries provide production estimates at standard moisture content, it is believed that the Romanians report grain output in terms of "bunker weight" (grains as harvested, with excess moisture and trash). Therefore, the Romanian estimates for 1980 must be discounted by 10 to 15 percent to make them comparable with other country output reported in table 1.

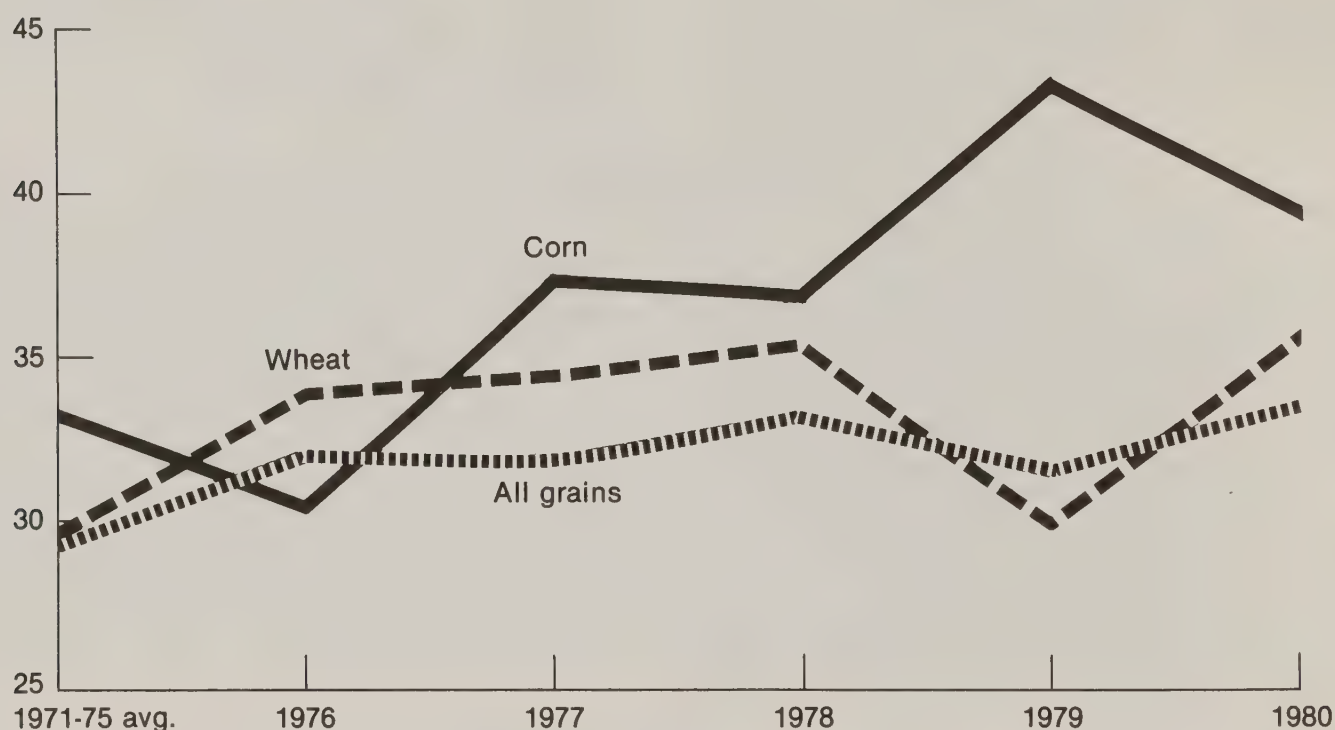
Approximately two-thirds of the grain supply in Eastern Europe is used for feed. Because Eastern Europe produces 85 to 90 percent of its grain requirements—well above the amount used for food and industrial purposes—most of the imported grains are used for feeding. Exceptions occur in years when either not enough wheat is produced domestically or the quality of wheat is not appropriate for milling. For example, wheat production in Yugoslavia in 1979 and 1980 did not cover demand for food use.

Total East European grain utilization in the 1979/80 (July-June) marketing year declined to an estimated 104 million tons from 108 million the year before. Poland, the region's largest grain importer, was unable to replace completely its short crop with imports because of financial and logistic constraints. Following the poor 1979 harvest, East European grain imports in 1979/80 surpassed 17 million tons, exceeding 1978/79 imports by 2.4 million tons. All East European countries except Hungary imported more grain. The United States exported

<sup>1</sup>See, for example, the Christian Science Monitor, April 2, 1980.

## Eastern Europe Grain Yields

Quintals/hectare



11.5 million tons of grain to Eastern Europe in 1979/80 compared with 5.7 million in 1978/79; thus the U.S. share of total East European grain imports increased from 40 percent to 68 percent.

Poland was the leading grain importer in the region with imports of above 7 million tons in each of the past 3 years (table 3). The United States is Poland's primary source of grain, but Poland has agreements with Canada, France, Sweden, and Austria for annual grain deliveries. Last September, the USSR, despite its own poor harvest, promised to export 500,000 tons of wheat to Poland in 1980/81. East European grain exports, which ranged between 3.3 million and 4.9 million tons from 1973 to 1978, declined to less than 2.2 million tons in 1979 but probably increased in 1980. These exports flowed primarily from the southern countries to the northern countries and the USSR. Table 3 shows East European grain trade from 1971 to 1979.

**Grain utilization and trade  
(July-June data)**

Year	Consumption	Exports	Imports	U.S. exports
1978/79	107.5	3.4	14.8	5.5
1979/80 <sup>1</sup>	103.9	3.0	17.2	11.5
1980/81 <sup>2</sup>	110.1	3.6	16.1	9.2

<sup>1</sup>Preliminary.

<sup>2</sup>Projections.

Source: *Foreign Agricultural Circular*, FAS, April 13, 1981.

## Grain Imports from United States at Record Level

During calendar year 1980, U.S. grain exports to Eastern Europe totaled 10.4 million tons, of which 8.2 million was coarse grain and 2.2 million was wheat. This was the largest volume of U.S. grain ever shipped to the region in any single year. Increased exports to Bulgaria, the GDR, and Romania more than offset smaller shipments to the other countries. In 1980, U.S. grain exports to the GDR exceeded exports to Poland for the first time. Wheat, accounting for 21 percent of total grain exports, increased to the GDR, Romania, and Yugoslavia. Yugoslavia imported only wheat, Bulgaria only corn; the rest of the countries imported both wheat and feed grains. Hungary imported neither. The United States granted CCC credits to Poland and Yugoslavia to facilitate grain imports in those countries.<sup>2</sup>

## Fall Sowing Less Than Planned

Late and unfinished sowing in the fall of 1980 does not augur well for 1981 grain production. In the region as a whole, an estimated 7 to 8 percent of the land earmarked for fall sowing—particularly for wheat—was not completed and must be sown in the spring. Farmers in Poland and Yugoslavia fell furthest behind schedule with sown area 12 percent and 13 percent smaller than planned,

<sup>2</sup>See section on U.S. Agricultural Trade with Eastern Europe.



respectively. All of the other countries fell behind to varying extents. It is likely that the southern countries will replace winter wheat acreage with corn, while the northern countries will substitute winter wheat with spring wheat and spring barley, which usually yield

about 10 percent less than the fall-sown varieties. Winter-kill has not yet been assessed, but no known above normal freeze damage has occurred. (Thomas A. Vankai)

## OILSEED PRODUCTION REACHES RECORD HIGH

### Production in 1980

Combined production of the major oilseeds in Eastern Europe—rapeseed, sunflowerseed, and soybeans—reached a record level in 1980. Total output is estimated at 3.9 million tons, 9 percent above the level of the preceding year and 3.2 percent above the previous record production achieved in 1978. A 10-percent increase in area, all of which was in rapeseed and soybean area, accounted for the higher production.

Rapeseed production, rebounding from 1979's disastrous results, nearly doubled to 1.26 million tons (table 4), but remained short of the average output for 1975-78. Rapeseed is grown primarily in the northern countries where Poland is the largest producer. In 1980, Poland was unable to fully recover area and production losses of the year before. A strong freeze following the disappearance of snow cover in March led to the loss of one-third of the area planted to rapeseed, a loss that is well above average in Poland. In Czechoslovakia, on the other hand, both area and production of rapeseed set records in 1980.

For the last decade the southern countries have been attempting to introduce soybean production on a large scale to reduce costly imports of soybeans and soybean meal. Results in 1980 were not heartening. Though soybean area was expanded, yields plummeted 11 percent and left production at 650,000 tons, or only slightly above the 1979 output. A late spring followed by dry weather during flowering led to lower yields in Romania and Bulgaria.

Sunflowerseed production in Eastern Europe in 1980 also registered a significant decline. Yields were down in all countries. In Yugoslavia, insufficient producer prices were mainly responsible for a reduction in planted area. Disease problems, possibly related to excess moisture, accelerated the decline in production. In Hungary, the high profitability of sunflowerseeds caused area to expand for the third year in a row and production was above that of 1979.

### Oilseed Products Consumption and Trade

In recent years the countries of Eastern Europe have attempted to improve feed ration formulation by increasing protein content relative to energy availability in feeds. This has resulted in the steady growth of oilmeal consumption<sup>3</sup> which increased 15 percent to 7.1 million

tons (see table below) over the last 4 years. By Western standards, however, oilmeal's share of total concentrates fed remains low. The GDR is the only exception in this case.

Soybean meal is the major oilmeal fed in Eastern Europe and its importance has been increasing. Between 1977 and 1980 soybean meal fed increased 1.2 million tons to 5.0 million tons, and its share of total oilmeal fed reached 70 percent.

Mention has been made recently in the Soviet press (*Pravda*, December 16, 1980) of the "possibility" of meeting Soviet import demand for soybeans and meal through East European sources. However, given current trends, this will not be a viable alternative in the foreseeable future. Eastern Europe is highly dependent on outside supplies of protein for animal feed. Processing from domestic crops and from seeds traded within the region accounts for roughly a fourth of total oilmeal disappearance. Though policy statements in most countries indicate an aim of increasing self sufficiency, there has been no real improvement in this respect in the past few years. The failure to significantly expand domestic supply capabilities has meant rising imports of meal and seeds. Preliminary figures for 1980 show that imports of oilmeal (including the meal equivalent of seeds), at 5.57 million tons, were 8 percent higher than in 1979 and 20 percent above those in 1977.

Eastern Europe is largely self-sufficient in vegetable oil, exporting and importing similar amounts in the same year. Growth in domestic production and rapidly rising imports of seeds for domestic crushing in the last several years have more than kept pace with demand.

Since 1979, the United States has been the primary supplier of oilmeal (including oilseeds in meal equivalent) to Eastern Europe. This has come through an expansion of the U.S. share of imported oilmeal to 40 percent<sup>4</sup> from 30 percent in the 1975-77 period and the rapid increase in East European imports of soybeans. In recent years, the United States and Brazil have traded positions as the region's chief oilmeal supplier, while the oilseed market has been almost thoroughly dominated by the United States.

In 1980, U.S. exports of oilmeal to the region increased 3 percent over the previous year and reached 1.7 million tons for the first time. Almost all of these exports were soybean meal. U.S. soybean exports of 732,000 tons in 1980 about equaled the 1979 level. Total oilmeal equivalent of U.S. exports for 1980 stood at approximately 2.3 million tons, roughly unchanged from the previous year.

<sup>3</sup>Including fish meal.

<sup>4</sup>Not including fish meal.

### Oilseed meal utilization, Eastern Europe, 1977-80

Item	1977	1978	1979	1980 <sup>1</sup>
Processing from domestic crops <sup>2</sup>				
Soybean meal	277	248	299	425
Sunflower meal	552	640	641	723
Rapeseed meal	685	586	667	325
Fish meal	91	90	89	89
Imports				
Oilseed meal	3,890	3,941	3,971	4,375
Soybeans <sup>3</sup>	220	553	639	645
Sunflowerseed <sup>3</sup>	68	46	66	70
Fish meal	476	477	494	480
Exports				
Oilseed meal	40	50	4	0
Apparent meal consumption	6,219	6,531	6,861	7,132

<sup>1</sup>Preliminary.

<sup>2</sup>Estimated from preceding year's harvest minus exports.

<sup>3</sup>Converted to meal equivalent.

Source: Country Yearbooks and FAO Trade Yearbook.

East European vegetable oil imports have come primarily from within the region itself as well as from Western Europe. The U.S. share has fluctuated around 10 percent in recent years with most exports destined for Poland under CCC credit financing.

Fall sowing of rapeseed in 1980 was hindered by delays in harvesting work, particularly in Poland. This resulted in a smaller area sown to rapeseed than in the previous year. As of mid-March, though, there had been no evidence of above-average winterkill. With adequate soil moisture at present, good weather through the summer could result in increased output of rapeseed in 1981.

Significantly higher producer prices in Yugoslavia are expected to result in increased area sown to sunflower there. Hungary may also increase its sunflower area.

With other countries maintaining sunflowerseed area, total area for the region could reach a record level this year. Any increases in soybean area for Eastern Europe in 1981 will depend on whether the Romanians continue to rapidly expand soybean area following last year's disappointing yields. Higher prices in Yugoslavia ought to result in moderate soybean area increases there, while in the remaining countries, little change in soybean area is likely.

Vegetable oil imports, which jumped in the second half of 1980 in Poland and Yugoslavia, are likely to remain strong until the 1981 harvest. U.S. sales are expected to be up in 1981, with all vegetable oil exports to Poland covered by CCC credit guarantees. (Edward Cook)

## PRODUCTION OF OTHER MAJOR CROPS DECLINES

### Sugarbeets and Sugar

A cold spring, combined with an excessively wet summer, caused sugarbeet production in Eastern Europe to fall to its lowest level since 1973. At 40.6 million tons, it was 13 percent below the 1979 harvest (table 4). A smaller harvested area (table 5) and lower beet yields contributed equally to the lower production figure. Only the GDR harvested more sugarbeets than the year before. Furthermore, because of generally poor weather conditions, sugar content was down in most countries. This situation will force Eastern Europe to be a net importer of sugar in 1981.

Poland alone accounted for most of the decline in sugarbeet production in 1980, harvesting just 10.4 million tons, compared with 14.2 million tons the previous year and an annual average of 15.5 million tons for 1976-78. While extremely poor weather throughout the growing season lowered beet yields, low producer prices

caused Polish farmers to curtail planting. With lower sugar content, sugar production from the 1980/81 refining campaign is estimated at slightly over 1 million tons, a shortfall of 500,000 tons from domestic requirements for this traditionally sugar-exporting nation. Following large imports from July 1980 to January 1981, most of which came from Western markets, Poland has reduced monthly sugar rations and is drawing down already tight stocks as much as possible, rather than attempting to fully meet the shortfall with imports from hard-currency sources.

Sugarbeet production in Yugoslavia in 1980 declined to 5.2 million tons, 12 percent below the record production of 1979. Unfavorable producer prices which led to area declines in the private sector were primarily responsible for this lower output. After achieving net-exporter status in sugar only as recently as 1979, Yugoslavia was able to export 292,000 tons in 1980. High carryover-stocks, rising world prices, and a renewed Government initiative to raise exports led to this high volume. Sugar production



from the current crop is estimated at 670,000 tons—roughly 75,000 tons short of domestic demand. With stocks currently drawn down, Yugoslavia will revert to being a net importer of sugar in 1981.

Following serious harvesting delays, the GDR was able to produce 7 million tons of sugarbeets in 1980. This compares with 6.7 million in 1979, and an annual average of 7.1 million tons for 1976-1978. With sugar content down from the year before, sugar production is estimated to be less than in the 1979/80 refining season.

Czechoslovakia harvested 7.1 million tons of sugarbeets, 7 percent less than in 1979 and well short of the planned goal of 8.2 million tons. Even with this shortfall and a reportedly lower sugar content, Czechoslovakia will remain a net exporter of 100,000-200,000 tons of sugar in 1981.

Elsewhere, Bulgaria harvested its lowest sugarbeet crop since 1968, just 1.4 million tons, nearly 30 percent below the figure for 1979. Depending on Cuban supplies, the Bulgarians could well be forced to purchase larger amounts of sugar in 1981 from Western sources. In Hungary, beet production was down marginally and reported sugar production fell nearly 5 percent.

The outlook for 1981 is for an upturn in area and production of sugarbeets in Eastern Europe. Decidedly higher producer prices this spring relative to last in Poland and Yugoslavia ought to insure higher area planted. In addition, Romania, Hungary, Czechoslovakia, and the GDR have announced intentions of regaining area losses incurred last year. Due to the rapidly rising costs of sugarbeet production in the region, however, the countries of Eastern Europe will continue to find it difficult to meet planned production targets.

## Potatoes

Excessive soil moisture during the summer months was primarily responsible for the lowest potato harvest in Eastern Europe in the post-World War II period. Compared with 1979, area harvested fell 5 percent and yields 35 percent—leaving yields at their lowest level since 1958. Each country harvested a smaller crop, with a total decline in production of 38 percent.

Poland, which accounts for two-thirds of East European potato production, suffered the greatest decline—nearly 50 percent. The problem of flooding and excess moisture was greatly exacerbated by a serious shortage of plant protection agents. The GDR, the region's second most important potato grower, experienced a decline of 25 percent in production.

Potato shortages in these two countries are significant not only because of the implications for human consumption, but also because most of the crop in Poland and the GDR is used for livestock feeding. In Poland, potatoes account for nearly 15 percent of all feed in oat-unit equivalents, and for hogs in the private sector the share is close to 40 percent. The decline in Polish potato production, from 50 million tons in 1979 to 26 million tons in 1980, will cause feed-use to drop from approximately 27 million tons in 1979/80 to an estimated 9-10 million tons in 1980/81. The resulting gap represents an

equivalent of 4.5 million tons of grain,<sup>5</sup> and had an impact by January on Polish hog numbers. In the GDR the situation is much less serious, with an estimated decline of potatoes for feed of roughly 500,000 tons of grain equivalent.

In the rest of the region, the declines were less severe and will have impact largely on supplies available for human consumption. The major exception here is Bulgaria, where a 25-percent decline in production is likely to seriously strain food potato supplies.

The outlook for potato production in 1981 is poor, largely because of shortages of quality seed potatoes. Officials in the Ministry of Agriculture in Poland have stated that area planted to potatoes in 1981 may not exceed 2 million hectares, which is only 82 percent of the 1979 level. In addition, some other countries have announced lower planned area figures for 1981. With average yields, this would mean continued strain on potato supplies next year.

## Tobacco

Tobacco production in 1980 totaled 346,000 tons, down 7 percent from 1979. Bulgaria, the region's largest producer and also the largest exporter of tobacco and tobacco products, had a disappointing oriental tobacco harvest, resulting in a 16-percent drop in total production to 133,000 tons. Wet weather, which promoted the spread of tobacco blight, caused production in Yugoslavia to fall more than 15 percent to 56,200 tons. Poland was the only major grower to increase production. Slightly lower yields were more than offset by greater area, resulting in a 15 percent increase in production to 85,000 tons.

In 1980 U.S. tobacco exports to Eastern Europe increased 34 percent to \$26.4 million, while imports fell 16 percent to \$35.7 million. Poland, Bulgaria, and Yugoslavia are the region's primary markets for U.S. tobacco.

Due to the lower 1980 production the outlook this year is for slightly lower tobacco exports from Eastern Europe. A recent 65-percent increase in leaf purchase prices in Yugoslavia and a 30-percent increase in Poland should insure higher tobacco area in 1981.

## Fruits and Vegetables

Vegetable production in 1980 declined throughout the entire East European region. A delayed spring followed by generally cool and excessively wet conditions through the harvest were primarily responsible. Declines were most significant in the northern countries. Production fell roughly 10 percent in the GDR, and nearly 20 percent in Poland. Quality of the harvest, generally, is believed to be poor.

Fruit production was also down in 1980; however, three countries—Yugoslavia, Czechoslovakia and Bulgaria—reported higher figures than in 1979. The

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<sup>5</sup>Using a coefficient of 0.25 to convert from potatoes to grain.

greatest decline came in Romania and the GDR, where, following an abundant 1979 crop, the fruit harvest was down over 20 percent. Grape production was down in all major growing nations, except Yugoslavia, where it increased 10 percent. Sugar content was generally lower than in 1979.

## **Cotton**

Eastern Europe, which is almost entirely dependent on

imports for its cotton, continues to rely on the USSR for about 80 percent of these imports.

In 1980 U.S. exports of cotton to Eastern Europe decreased 20 percent to 26,700 tons, representing \$44.3 million in sales and approximately 4 percent of the region's imports. U.S. markets in Eastern Europe include Poland, Romania, Yugoslavia and Hungary. It is expected that cotton demand in Eastern Europe will continue to show only slight growth over the next few years.

The trade in related agricultural commodities for the period 1971-79 is shown in table 6. (Edward Cook)

## **LIVESTOCK SECTOR SHOWS POOR PERFORMANCE**

### **Animal Numbers Down**

Cattle and hog inventories declined in 1980 in the region while the number of sheep increased slightly (table 7). The weather, which adversely affected the domestic feed supply, contributed significantly to the poor performance. Grazing got off to a late start; the first cut of hay was poor and, in Poland particularly, a disastrous potato crop aggravated the feed situation. Potato shortages in Poland affected mainly private hog producers, who use potatoes for feed extensively.

Cattle numbers in the region were down 2 percent and hog numbers 1 percent. The GDR reported 2 percent more cattle, partially offsetting declines in several other countries. Hog numbers increased considerably in the GDR, but declined in Hungary and Poland. The number of sheep was down in Bulgaria and Poland, up in the GDR and Romania and stable in the rest of Eastern Europe. Poland recorded the heaviest drawdowns: 6.8 percent in cattle numbers and 11.5 percent in hog numbers.

### **Slowdown in Livestock Production Growth**

Total meat production in the region in 1980 declined by 235,000 tons or 2 percent to 11.9 million tons (table 8). Decreased production of red meats was offset somewhat by increased poultry production. Beef production was down by 4 percent with the largest declines in Poland and Romania. Pork production was down by 1 percent with the largest declines in Poland and Yugoslavia. Reduced pork production in Poland, Romania, and Yugoslavia was partially offset by increases in the rest of the region. Poultry production increased in all countries except the GDR. In Poland, total meat production fell by 5 percent to 3.1 million tons.

East European milk production, at 44.1 million tons, was slightly higher than in 1979 reflecting improved yields per cow. While the fluid milk supply was sufficient for domestic consumption, the supply of butter did not satisfy demand in Poland, Romania, and Yugoslavia, resulting in sporadic shortages. Egg production in the region was up by 1 percent to 37.1 billion despite a 6-percent decline in Romania. Egg production satisfied domestic demand but production for export was discouraged because of low profit margins.

### **Producer Prices Up, Retail Prices Held Stable**

Rising production costs forced all governments in the region to increase producer prices. The governments, however, were unwilling to pass the price increases on to consumers, except in Yugoslavia, so they opted instead to increase subsidies from the state budget to maintain stable retail meat and milk prices.

Producer prices were selectively increased in all East European countries. The price increases were devised to favor cattle and improve the price ratio between beef and other meats. The rationale for this price policy was that cattle consume less concentrated feed in their rations than do either hogs or poultry, so that reliance on concentrated feed imports could be reduced. Poland instituted the steepest producer price increases. Prices for cattle were hiked 26 percent, for hogs, 16 percent. The GDR increased only cattle and milk prices. Bulgaria raised wool prices the most—by 63 percent—probably to reverse the decline in sheep numbers.

The increases in producer prices further narrowed the small gap between producer and consumer prices. This price policy forced all countries to increase the already high share of retail food price subsidies which in 1980 amounted to 10 to 20 percent of their national budgets.

In Yugoslavia, meat prices were allowed to rise 30 to 50 percent depending on types and cuts of meat. In Poland, no official retail price increases were announced but meat fixed at the low prices was difficult to obtain. The better quality meats were sold only in "commercial shops" for much higher prices. This two-tiered meat merchandising system has been in effect in Poland for a few years with tacit consumer acceptance. But in July 1980, boneless beef, geese, duck and pigs knuckles were added to the specialty items sold exclusively in "commercial stores." With the added items, the amount of meat sold for higher-than-fixed prices increased from 20 percent to about 40 percent of total retail meat sales. This shift of meat to the higher-priced commercial shops and shortages in regular stores touched off strikes in July and August 1980. Despite compensatory wage increases, the discontent spread and led to the formation of the "Solidarity Union."

Solidarity compiled a list of both economic and political grievances, and demanded remedial actions from the



Polish Government. The Union included in its requests the abolition of commercial shops and the introduction of equitable meat sales through rationing. The government, to appease the Union, devised a meat rationing system effective April 1, 1981.

The other East European governments except Yugoslavia committed themselves to maintain prevailing retail meat prices during 1981.

In 1980, meat consumption increased only in Czechoslovakia and the GDR, where it already exceeded 84 kg per capita (table 9). Per capita meat consumption declined in Poland and leveled off in the other East European countries because of tight supplies.

### **Livestock Product Trade Pattern Basically Unchanged**

Despite shortages in domestic markets, the region remained a net exporter of animals for slaughter and of meats. The region, however, is a net importer of hides and skins (table 6). Hungary was the leading exporter of live animals and poultry. In 1980, Hungarian exports of hogs and poultry were up 4 and 6 percent respectively. Cattle exports declined 64 percent and sheep exports declined 7 percent.

Yugoslavia increased its beef exports to the European Community (EC) by 10 percent. Polish exports of canned meat other than ham and poultry increased but raw meat, ham and bacon exports declined. However, as

domestic meat supplies dwindled in the second half of 1980, Poland imported 47,000 tons of meat—three quarters of which were beef—mainly from Western Europe.

The USSR was Hungary's principal market for cattle, hogs, poultry, and eggs. Italy was next in importance for Hungarian cattle and sheep, followed by Libya for cattle exports. Libya was Bulgaria's leading market for sheep. The Federal Republic of Germany (FRG) was the GDR's principal export market for all livestock products. Greece was the principal destination of Yugoslav "baby beef." Italy was Poland's leading customer for beef, the United Kingdom for bacon, the United States for canned ham, and the FRG for canned meat and poultry.

Processed meat, mainly canned ham and pork, was the leading U.S. agricultural import from Eastern Europe. In 1980, the United States imported 67,000 tons of meat from the region—10,000 tons below the all time high reached in 1979. Almost two-thirds of these imports were shipped from Poland. Cheese, the next most important U.S. agricultural import from Eastern Europe in terms of value, also declined from 7,788 tons to 5,482. Half of the cheese imports originated in Romania.

Cattle hides were the principal U.S. livestock product exported to Eastern Europe in 1980; however, these exports declined 29 percent to 2.4 million pieces, the lowest level in a decade. Poultry exports to Romania of 4,725 tons were the second largest U.S. export item in the livestock and livestock product category. (Thomas A. Vankai)

## **FOREIGN TRADE AND FINANCE**

### **Balance of Trade Improves**

The region's balance of trade deficit improved in 1980, dropping to \$10.6 billion from \$11.2 billion in 1979 (table 10). Improved balances in Bulgaria, Hungary, Romania, and Yugoslavia compensated for increased deficits in the other countries. However, Yugoslavia once again had the largest trade deficit—\$5 billion. Overall, the region's exports in current prices increased 11 percent and imports 9 percent over 1979 levels.

A breakdown of 1980 trade into ruble and nonruble denominations is not yet available. In 1979, the region's ruble deficit dropped 39 percent from 1978 to R1.06 billion, probably indicating increased exports to the Soviet Union (table 11). However, the balances of Czechoslovakia, Romania, and Yugoslavia deteriorated significantly. The share of export trade with the Council of Mutual Economic Assistance (CEMA) has remained stable since the mid-1970's for all countries except Bulgaria, Hungary, and Yugoslavia where it has declined. Imports from CEMA as a percent of total imports have increased significantly for Poland and Bulgaria and declined for Hungary while remaining the same for the other countries. In an effort to cut hard currency deficits, the rate of increase in nonruble exports was greater than the rate of increase in ruble exports during 1979 over 1978.

Much heralded regionwide export promotion and import substitution policies probably played a major role in improving the balance of trade situation in 1980. How-

ever, increasing prices for raw material imports (particularly Soviet petroleum and natural gas), sluggish economic growth in the West, mediocre agricultural performance, and an overall deterioration in the terms of trade will force the region to continue to limit imports and expand exports to preserve 1980's improvement in the trade balance.

### **Agricultural Trade Balance Negative**

Regionwide agricultural trade data for 1980 is not yet available but Eastern Europe's historically negative balance likely persisted. The \$3.8-billion deficit in 1979 was a record. For 1979, only Bulgaria, Hungary, and Romania reported agricultural trade surpluses. Agricultural products accounted for 10 and 13 percent, respectively, of total East European exports and imports. Poor agricultural performance in 1979 and higher prices caused imports of these products to jump 20 percent over 1978 levels while exports increased 12 percent. Poland was the largest agricultural importer followed by the GDR and Czechoslovakia. Hungary continued to be the largest agricultural exporter, followed by Romania, Poland, and Bulgaria. Grain, cotton, oilseed products, wool, cattlehides, and coffee are the main agricultural imports while meat, tobacco, grain, fruits, vegetables and wine are the main agricultural exports.



For 1980, Hungary reported that 30 percent of total trade with convertible currency countries was in agricultural products with 40 percent of all agricultural exports going to the developed capitalist countries. Agricultural exports increased 43 percent over 1979 as part of the effort to reduce Hungary's trade deficit. Yugoslavia estimates 1980 agricultural and food-product exports of \$800 million to \$1 billion with meat and livestock the most important exports. According to Yugoslav reports, meat and livestock exports should total \$333 million for 1980 with the bulk of these exports going to convertible currency markets. For 1981, Yugoslavia plans to export \$412 million worth of red meat and livestock products (86.6 percent to convertible-currency markets) and \$223 million worth of grain (71 percent to convertible currency markets).

In 1980, Poland received above-plan shipments of agricultural products on favorable terms from Hungary, Bulgaria, the GDR, Czechoslovakia, and the USSR as part of a Soviet-backed aid effort. Also, the EC and Poland reached agreement in December 1980 on increased EC agricultural exports to Poland at 10-15 percent below prevailing market prices. Unofficial estimates put the value of the sale at approximately \$270 million. Poland will import sugar, grain, and meat and livestock products using bilateral credits negotiated with most of the EC-member countries. In early April 1981, the EC approved additional subsidized food aid to Poland worth \$120 million. The commodity content of this aid package is similar to the one approved by the EC in December, 1980. Also, early in 1981, the United States announced a concessional sale of butter and nonfat dry milk to Poland worth \$71 million. The United States will accept payment in Polish zlotys.

In spite of severe foreign currency constraints, Polish officials have indicated that 1981 agricultural imports, particularly of meat and livestock products, will be relatively high to make up for anticipated domestic production shortfalls and to satisfy consumer demand. Exports of meat—an important convertible currency earner for Poland—should be lower in 1981 due to declining domestic production and high domestic demand. For Eastern Europe as a whole, 1981 agricultural trade will again be negative, even in the face of tough policies to reduce overall imports as demand—primarily for grains, oilseeds and oilseed products—remains well above domestic supply.

## Financial Developments

Net hard currency debt at the end of 1980 was an estimated \$73 billion, up from \$63.2 billion in 1979. Estimates of debt service as a share of export revenue from non-Communist countries in 1980 ranged from over 100 percent for Poland to slightly over 20 percent for Czechoslovakia and Romania. In 1980, Polish officials expressed for the first time an interest in refinancing loan repayments scheduled for 1981-83. Two-thirds of a \$675-million Western loan made in August 1980 will fund Poland's existing debt. Poland has also received hard currency assistance from the Soviet Union. As of

early 1981, Soviet hard currency loans, direct commodity shipments, and repayment deferrals on hard currency loans amounted to approximately \$2 billion, including a \$1.1 billion hard currency loan granted Poland in February 1981. As part of a joint-aid effort by Poland's Western creditors, the United States deferred repayment in late February 1981 on \$88 million in U.S. Government credits (CCC) owed by Poland.

In 1980, the International Monetary Fund authorized Romania and Yugoslavia, the only East European members of the organization, to purchase special drawing rights (SDR's) amounting to \$158 million and \$45 million, respectively, to finance imports. Also, Romania received a total of \$240 million in loans from the World Bank to improve facilities in the fruit processing industry and to fund an unrelated irrigation project. Yugoslavia obtained a \$110 million loan from the Bank for regional development.

In the area of cooperation with the West, Dow Chemical Co. and Chemolimpex of Hungary concluded an agreement worth \$75 million in December 1980. Dow Chemical will supply raw materials for agriculture and the chemical industry in Hungary in exchange for chemical products over the next 5 years.

## Trade Policy Developments

On January 1, 1981, Romania reorganized its foreign trade sector to increase trade turnover by 50-58 percent in the 1981-85 5-year plan period. The reorganization calls for closer business ties between producing enterprises and foreign trade organizations (FTO) to insure adequate export supplies and places greater emphasis on profit in determining the performance level of FTO's and enterprises producing for export.

More significantly, Hungary set up a new type of FTO called Generalimpex, which has authority to import and export any type of product. Previously, FTO's had authority to import and export only specific product lines. By encouraging competition among FTO's for export products, the Hungarian government hopes to stimulate production of export goods, improve product quality, and lower costs.

In March, Poland revamped its foreign investment code to attract Western investment. However, the changes are within the standard mold of East European foreign investment statutes. It is doubtful that this policy change will have any immediate effect on raising the level of foreign investment in Poland due to the unstable political and economic situation there.

On January 1, 1981, Bulgaria replaced its restrictive foreign investment code with a new code allowing joint ventures in virtually all sectors of its economy. The share of foreign participation may exceed 50 percent—an innovation in Eastern Europe—but management must be headed by a Bulgarian. Foreign investment is desired particularly in the raw materials and energy sectors.

In the face of rising trade deficits, Yugoslavia devalued the dinar in June by approximately 35 percent vis-a-vis the dollar. In Romania a substantial currency reform came into force on January 1, 1981. The lei was



devalued and a uniform exchange rate set up. These measures should result in a closer relationship between world and Romanian prices and eliminate, according to Romanian authorities, that country's balance of payments deficit by 1990. Also, Hungary revalued the forint against the transferrable ruble (the accounting currency used in intra-CEMA trade) in 1980. More importantly, a uniform exchange rate for tourist and commercial transactions will be introduced in 1981. There was also speculation in late 1980 that the forint would move to limited convertibility in preparation for Hungarian entry into the IMF. Such an action would not be unexpected in view of Hungarian economic policies since 1968.

## U.S. AGRICULTURAL TRADE WITH EASTERN EUROPE

U.S. agricultural exports to Eastern Europe were a record \$2.3 billion in 1980, 13 percent above the 1979 level and the second record year in a row (table 12). It is likely that the U.S. sales suspension of certain agricultural exports to the Soviet Union played a role in boosting U.S. agricultural exports to Eastern Europe in 1980. As a consequence of the sales suspension, certain other agricultural exporting countries shifted grain exports to the Soviet Union, taking advantage of higher prices paid by that country. These exports would have gone elsewhere, some eventually to Eastern Europe. The United States increased its share in the East European grain import market by replacing these diverted exports. Also, poor 1979 crop production in the region contributed to the increase in imports from the United States. It is unlikely, however, that U.S. agricultural commodities covered by the sales suspension were transshipped through Eastern Europe to the USSR as the region needed all its imports of grain and oilseed products to meet domestic demand.

Export volume and value increased for wheat, feed grains, and soybean meal, remained steady for soybeans, and declined for vegetable oil, cotton, and cattlehides (see table below). Unit price increases were the greatest for corn followed by cotton and wheat. Unit price declines were greatest for cattlehides, vegetable oil, and soybeans (see table below). Agricultural exports accounted for 69.4 percent of all U.S. exports to the region in 1980, only slightly less than the preceding year (table 13). U.S. exports to the GDR were virtually all agricultural (95 percent) while agricultural exports to

Finally, Romania and Yugoslavia signed 5-year agreements with the EC in 1980. The Romanian-EC agreement covers trade in manufactured goods and should allow for increased Romanian exports to the EC and open up new sources of hard currency credit in Europe. The Yugoslav-EC agreement was signed in February 1980 and contained substantial concessions to Yugoslavia. All EC tariff and nontariff barriers to Yugoslav exports will be reduced. In the agricultural sector, Yugoslav officials anticipate higher exports to the EC of wine, tobacco and meat, particularly veal, as a result of the agreement. (Robert Cummings)

Yugoslavia and Hungary amounted to less than 40 percent. The commodity character of U.S. agricultural exports followed past patterns. Shipments of grains, soybeans, and soybean meal accounted for 90 percent of all agricultural exports to Eastern Europe.

Poland remained the largest U.S. agricultural customer, accounting for 30 percent of all agricultural exports to Eastern Europe. Bulgaria and Hungary were the smallest buyers.

The value of U.S. agricultural imports from Eastern Europe declined in 1980 for the second straight year. Imports of \$311 million were 12 percent below year earlier levels. Imports of processed meat, mostly canned pork, accounted for 70 percent of the total. Poland remained the largest source, accounting for 50 percent of total East European agricultural exports to the United States (table 14).

**Eastern Europe: Unit prices of U.S. exports in selected commodities, 1972-80**

Year	Wheat	Corn	Soybeans	Soybean meal	Soybean meal/corn
Dollar per ton				Price ratio	
1972	57	53	123	116	2.19
1973	99	78	204	206	2.64
1974	125	130	235	220	1.69
1975	154	132	257	172	1.30
1976	136	117	203	179	1.53
1977	94	97	266	213	2.20
1978	119	105	245	210	2.00
1979	166	120	282	233	1.94
1980	174	135	266	230	1.70

Source: Compiled by Eastern Europe and USSR Branch.

**Indices of U.S. export volume and value in 1980**

Commodity	Volume	Value
1979 = 100		
Wheat	115	125
Feed grains	116	131
Soybeans	100	94
Vegetable oil	84	82
Soybean meal	108	106
Cotton	82	88
Cattlehides	73	58

Source: Compiled by Eastern Europe and USSR Branch.

## CCC Credit Use Increases

Commodity Credit Corporation export credit and credit guarantee use by Eastern Europe increased to \$643 million in fiscal 1980 (October 1979-September 1980) from \$579 million in FY 1979. CCC credits are one of the primary export promotion devices of USDA. Poland,

**GSM-5, 101 and 102 credit-financed exports to Eastern Europe**

Country	Commodity	FY 80		FY 81 <sup>1</sup>	
		GSM-5	GSM-101	GSM-101	GSM-102
Million dollars					
Poland	Total	198.7	364.3	—	670
	of which:				
	Feed grains	118.7	183.1		
	Soybeans	39.9	38.4		
	Soybean meal	27.7	67.2		
	Wheat	.001	36.5		
	Cotton	0	10.2		
	Rice	5.0	.2		
	Other <sup>2</sup>	7.4	28.7		
Yugoslavia	Wheat <sup>3</sup>	48.9	6.1	6.4	-
Romania	Soybean meal <sup>4</sup>	25.0	0	-	50.0
Hungary	Protein meal <sup>5</sup>	0	0	-	-

<sup>1</sup>Authorized credit guarantees.

<sup>2</sup>Includes linseed meal, soybean protein and linseed oil for GSM-5 and tobacco, soybean protein, tallow, cottonseed meal and linseed meal for GSM-101.

<sup>3</sup>Total FY 80 authorization was \$50 million for GSM-5 and \$30 million for GSM-101.

<sup>4</sup>Total FY 80 authorization was \$35 million for GSM-5.

<sup>5</sup>Total FY 80 authorization was \$15 million.

Source: Compiled by Eastern Europe and USSR Branch.

Romania, Hungary, and Yugoslavia are the only East European countries eligible for CCC credits. These countries have used credit under the GSM-5 Export Credit Sales Program. Romania and Poland are using the new GSM-102 All Risk Assurance Program, while only Poland and Yugoslavia have used the GSM-101 Non-Commercial Risk Assurance Program. The GSM-5 Program directly finances exports at a fixed interest rate, while the GSM-101 and 102 programs encourage private financing by guaranteeing repayment should default occur for non-commercial (GSM-101) or any commercial or noncommercial reason (GSM-102). For FY 1981, the GSM-5 program was dropped and the GSM-102 program instituted.<sup>6</sup>

Poland was the largest regional user of CCC credits in FY 1980, using \$563 million in GSM-5 and GSM-101 credits. For FY 81, Poland has received \$670 million in GSM-102 credit approvals—the largest amount for any country in a single year. For detailed CCC credit use by East European recipients, see table above.

## U.S. Exports to Rise Slightly in 1981

The value of U.S. agricultural exports to Eastern Europe in FY 1981, estimated at \$2.4 billion, should be slightly above FY 1980 exports. Fiscal year estimates are made for U.S. agricultural exports as this time span approximates more closely the influence of one crop year on import demand than does the calendar year. The composition of exports in FY 1981 will be similar to previous years—primarily grains, oilseeds, and oilseed products. The rate of East European livestock production—a major determinant in the level of U.S. agricultural exports to the region—will be retarded in 1981 by continued slow East European economic growth and rising import prices for feed. Increased prices for U.S. agricultural exports will account for the estimated value increase in FY 82 exports to the region. (Robert Cummings)

## INVESTMENT AND INPUTS

### Investment Levels Off

Growing pressure to limit new investment in most countries of the region caused agricultural investment in Eastern Europe to stagnate in 1980. Increases in Bulgaria and Romania of roughly 10 percent were counterbalanced by declines in Hungary and Poland. In Poland, the decline was dramatic and exceeded 15 percent.

<sup>6</sup>For detailed information on specific CCC credit programs, the types of assistance available, and the product coverage, contact: Commercial Export Credits Branch, FAS, Rm 4522 South, USDA, Washington, D.C. 20250.

Due to rising import demand for agricultural commodities in recent years, the majority of which come from hard-currency countries, agriculture has been allotted higher investment priority in many countries of the region and an increase in agricultural investment is expected in 1981. This is particularly true of Poland, where agricultural investment is planned to reattain its 1979 level. Increased agricultural investment is also anticipated for Romania and Bulgaria. However, with lagging economic growth and the growing burden of uncompleted investment projects, Eastern Europe will be less capable than in the past to expand investment in agriculture over the next few years.



## Fertilizer Production and Use

Use of chemical fertilizers continued to show only modest gains in 1980. Higher costs of imported fertilizer and fertilizer raw materials and the need to economize on energy use were largely responsible for the below-plan performance. Simultaneously, growing investment constraints and the need to shift fertilizer production to more concentrated types have forced many East European nations to hold back on increases in capacity and to emphasize modernization and conversion of existing plants. In certain countries, notably Yugoslavia and Romania, emphasis has been placed on improving the balance of payments situation through higher export of fertilizers. One result of this situation was that use of NPK fertilizers in Eastern Europe was estimated to have increased less than 1 percent over 1979.

Underlying the stagnation in fertilizer use was a slight decline in domestic production. In 1980 production of fertilizer—nitrogen, phosphate and potassium in active matter—totaled 12.34 million tons,<sup>7</sup> compared with 12.56 in 1979 and 12.64 in 1978. Declines in Poland largely accounted for the fall.

Eastern Europe as a whole is largely dependent on outside supplies of certain fertilizer raw materials as shown in the tables below. In 1979, with the exception of Romania, the region imported well over half of its requirement of natural gas, almost all of which came from the Soviet Union. It is believed that practically all facilities in the region for production of nitrogen fertilizers have converted to natural gas. With domestic production of natural gas falling gradually, and demand increasing, all countries of Eastern Europe, except for Romania, will be increasingly dependent on the Soviet Union for meeting their needs. In fact, available evidence for 1980 shows that Soviet deliveries of natural gas increased markedly.

Without a correction for P<sub>2</sub>O<sub>5</sub> content, it appears that the Soviet Union supplies less than half of East European phosphate rock imports. Import demand is most com-

## Production of certain fertilizer raw and intermediate materials, 1979

Country	Natural gas	Synthetic ammonia	Sulfuric acid
	Million m <sup>3</sup>	1,000 tons	
Bulgaria	137	951	998
Czechoslovakia	851	977	1,253
GDR	6,467	1,312	952
Hungary	6,507	976	603
Poland	6,953	1,860	2,982
Romania	32,281	2,837	1,750
Yugoslavia	1,857	509	1,047

pletely met through Soviet exports for the GDR and Hungary, while Poland and Yugoslavia have the smallest share of their phosphate rock requirements met through Soviet sources.

Poland, one of the world's major exporters of sulfur, is the primary source for other countries of the region. Sulfur, in the form of sulfuric acid, is used in processing phosphate fertilizers. In 1980 Polish production of sulfur fell 6 percent. It is not yet evident to what extent imports by other East European countries have suffered as a result.

The outlook for 1981 is for continued slow growth in fertilizer use in Eastern Europe. Increased use is most likely in Yugoslavia, Bulgaria and Romania.

In Poland, though plans call for a 10 kg./ha. increase in fertilizer use, deliveries have been running behind year-earlier levels, making increased use this year highly unlikely. The largest problems with Poland's fertilizer industry have been unreliable and irregular supply of raw materials and aging of capital stock. As a result, production of nitrogen fertilizer in active matter has fallen from 1.4 to 1.3 million tons in the last 2 years, though capacity reportedly exceeds 1.6 million tons.<sup>8</sup> In attempts to alleviate current shortfalls in production, the Soviets have agreed to supply 120,000 tons of ammonia and an extra 100,000 tons of phosphate rock this year. In addition, the USSR will increase exports to Poland of urea and potassium fertilizers. The Government of Poland recently signed an agreement with Occidental Petroleum for cooperation in phosphate fertilizer production. Under the agreement, which remains in a tentative stage, Occidental is to supply phosphate rock and phosphoric acid to the Poles.

Current Polish investment priorities call for modernization of nitrate plants and conversion of phosphate plants to production of triple superphosphate.

Improvements in Bulgarian fertilizer production and use recently have been aided by rapidly increasing supplies of Soviet natural gas. However, according to Bulgarian specialists, current use of roughly 195 kg/ha. remains 20 percent short of scientific guidelines. Bul-

## Fertilizer use<sup>1</sup>, Eastern Europe, 1971, 1975, and 1978-1980

Country	1971	1975	1978	1979	1980 <sup>2</sup>
Kilogram/hectare arable land					
Bulgaria	141	157	172	193	197
Czechoslovakia	254	305	334	335	332
GDR	332	370	331	340	340
Hungary	171	276	286	280	272
Poland	172	236	241	239	242
Romania	60	88	105	116	113
Yugoslavia	82	90	108	111	115
Eastern Europe	153	199	211	215	215

<sup>1</sup>Nitrogen, phosphate and potassium in active matter.

<sup>2</sup>Preliminary.

<sup>7</sup>Not including Yugoslavia.

<sup>8</sup>Wies Wspolczesna, No. 1, 1981, p. 45

### Imports of certain fertilizer raw materials, 1979

Country	Natural gas		Total	Sulfur		Phosphate Rock	
	Total	From USSR		Total	From Poland <sup>1</sup>	Total	From USSR
	<i>Million m<sup>3</sup></i>			<i>1,000 tons</i>		<i>1,000 tons</i>	
Bulgaria	3,450	<sup>3</sup> 3,450	NA	—		1,141	402
Czechoslovakia	6,750	<sup>3</sup> 6,750	501	443		<sup>4</sup> 322	<sup>4</sup> 171
GDR	4,500	4,500	NA	163		<sup>4</sup> 460	<sup>4</sup> 363
Hungary	2,723	2,523	209	140		592	467
Poland	3,983	3,983	—	X		3,327	636
Romania	<sup>2</sup> 770	<sup>3</sup> 770	NA	185		<sup>5</sup> 924	NA
Yugoslavia	702	616	67	66		896	71
Eastern Europe	22,878	22,592	NA	997		<sup>6</sup> 8,302	<sup>6</sup> 3,178

— Negligible

NA = Not available

X = Not applicable

<sup>1</sup>Polish trade data, except for Yugoslavia.

<sup>2</sup>Based on assumption of all imports coming from the USSR.

<sup>3</sup>Based on Soviet value data in *Vneshnaya torgovlya*, 1979.

<sup>4</sup>In P<sub>2</sub>O<sub>5</sub> equivalent.

<sup>5</sup>Includes only the category "apatities" as reported in the Romanian Statistical Yearbook, 1980.

<sup>6</sup>GDR and Czechoslovak data converted to raw basis by a coefficient of 3. Total excludes Romania.

garia plans to increase fertilizer use by shifting production to higher concentrate and compound varieties. Expansion of production capacity in Yugoslavia, though running behind schedule, will result in higher production of fertilizer there in 1981. Supplies to the domestic market are planned to increase 15 percent this year, though in actuality this amount will be moderated by the profitability of exporting fertilizer.

The high cost of fertilizer in Hungary has led to smaller purchases by farms for the second straight year. Supplies of nitrogen fertilizer are said to be adequate, though over two-thirds is of low concentration (e.g., ammonium nitrate). Shortages of phosphate rock and sulfuric acid have limited expansion of phosphate fertilizer production. A 6-percent increase in prices this year is likely to limit expansion in use.

Czechoslovakia and the GDR, the region's most intensive users of fertilizer, have already attained optimal levels of nitrogen use of 120-140 kg/ha. of arable land. Indeed, Czechoslovakia has noted increasing problems with ground water pollution related to its high level of fertilizer use. The East Germans have switched emphasis to more efficient application rather than increased use of fertilizer.

Rising production costs are likely to be retard future growth in fertilizer use in Eastern Europe. Retail prices generally fail to cover costs of production at present. With increasing costs of imported raw materials from both the West and from within CEMA itself along with higher processing costs, producer subsidies will have to expand if higher prices are not to dampen demand.

Future growth in phosphate fertilizer production could well hinge on the ability of the USSR to increase supplies of phosphate rock, and the ability of Poland to keep up previous levels of sulfur exports to the other countries of the region.

### Irrigation and Drainage

Under pressure to limit capital investment, land improvement work made little headway in 1980. Irrigable area expanded most in Romania (by 75,000 ha.) and the GDR (40,000 to 50,000 ha.), while there was small or no growth in the other countries. Drained area was expanded most in the northern countries, where flooding has proven to be a serious problem. In 1980, Poland is estimated to have increased drained area by 80,000 hectares to a total of almost 3.9 million hectares. Officials indicate that at least 2 million more hectares are in need of drainage facilities there. Czechoslovakia expanded drained area by an estimated 60,000 hectares to a total of almost 1.1 million hectares.

During 1980 problems became obvious with the effectiveness of existing irrigation facilities in Romania and particularly Bulgaria. Disappointing corn and soybean

### Irrigable area<sup>1</sup>, Eastern Europe, 1980

Country	1,000 hectares	Percent of arable land
Bulgaria	1,200	28.2
Czechoslovakia	312	6.0
GDR	1,000	19.8
Hungary	420	7.8
Poland	525	<sup>2</sup> —
Romania	2,266	21.6
Yugoslavia	160	2.0

<sup>1</sup>Preliminary and estimates.

<sup>2</sup>Not applicable. Most of Polish Irrigation is of meadows and pastures.



yields, despite large portions of those crops being sown on irrigable land, indicated either a less than optimal use of facilities or inclusion in the total irrigable land figure of systems which are no longer operable. Bulgarian specialists indicate that actual use of the older, labor-intensive systems is low. Moreover, in 1980, reconstruction work on irrigation systems encompassed only 23,400 hectares.

The outlook for 1981 is for continued expansion of irrigable area, primarily in Romania and the GDR. Two Romanian projects are being undertaken with World Bank assistance. In Yugoslavia there are plans for a \$35-million investment project in the Danube-Tisa-Danube complex, which by 1985 is planned to bring 100,000 hectares under irrigation and drain 200,000 hectares. Bulgaria will continue to cooperate with the Soviet Union in developing systems for piped irrigation with the use of air injection to improve the timing of moisture availability.

### **Farm Machinery**

The trend toward higher-powered, more specialized machinery continued in most countries of Eastern Europe in 1980. Tractor numbers continued to increase primarily in Poland and Yugoslavia, where the private farming sectors remain relatively under-capitalized, while other countries met replacement requirements and exported a good share of tractor production. Actual

horsepower availability continued to increase in all countries.

Partly in an attempt to save fuel, and partly to increase efficiency, truck deliveries to agriculture are increasing and trucks are replacing depreciated tractors in many countries. In Czechoslovakia, for instance, plans call for the introduction of 10,000 special-purpose trucks to agriculture which will replace 27,000 tractors over the next 5 years.

Lack of spare parts remained a serious constraint on machinery availability in all of Eastern Europe with no change in sight for the future. Despite larger supplies of spare parts in Poland, serious shortages developed for oil filters, batteries, and tires. The current situation in agricultural repair stations in Poland is thought to be worse than last year.

The outlook for 1981 is for slightly lower deliveries of tractors to agriculture. In Yugoslavia, emphasis on larger exports will likely reduce domestic availability. In Hungary, already high prices for machinery and narrowing profit margins on farms will likely continue to dampen demand for new machinery. In Poland supplies for individual farmers are to be appreciably stepped up at the expense of larger machines for socialized farms. Machinery supplies are to increase by 10 percent, almost all of which are destined for the private sector. Spare parts supplies are planned to increase 25 percent at the expense of tractor production. (Edward Cook)

## **AGRICULTURAL POLICY DEVELOPMENTS**

The ultimate agricultural goal in Eastern Europe—the achievement of self-sufficiency in food production and reduced feed imports—has not changed. To reach this objective, administrative and price policies have stimulated a faster rate of increase in the domestic feed base than in livestock product output. Agricultural performance, however, was worse than planned in 1980 as well as throughout the whole 1976-80 plan period. External economic influences, improper management, lack of adequate production incentives, and natural causes all contributed to the underachievement of the often ambitious plans. Nevertheless, some progress was made: total agricultural production during 1976-80 was about 8 percent larger than in 1971-75.

In furthering their policy goals the individual countries used administrative and price measures to varying degrees. In general, the central governments provided the macroeconomic guidelines and remained the watchdogs of performance, but were not involved in day-to-day decision-making at the farm level. Management responsibilities in Bulgaria, for example, were placed in the hands of Agro-Industrial Unions—28 large organizations, each of which was supposed to achieve self-sufficiency in food production, meet a quota for food sales to the central purchasing agency, and have a balanced budget. The increased freedom of operation at the local level was reflected in the reduction of obligatory central guidelines from 24 to 4, namely, specified sales of agricultural commodities to the state, restrictions in foreign trade, contri-

butions to the state budget, and limits on input use. The results of these relaxed regulations have not been completely satisfactory. The Bulgarian Government found unjustified wage and price increases in some Agro-Industrial Unions and decided to tighten central controls.

Since 1979, Romania has been moving in the same direction as Bulgaria in administering farm production. Romania divided the country into 40 geographically delineated districts, plus Bucharest, with each district given the task of achieving self-sufficiency and meeting a food-sale quota to the central purchasing agency. Yugoslavia, Hungary, and Poland rely primarily on prices and profits to stimulate production. Czechoslovakia and the GDR also utilize price mechanisms, but they place more emphasis on administrative measures.

### **Private Farming Strengthened**

Government support for small, individual producers is growing. This is true not only in Poland and Yugoslavia, where private land ownership predominates, but also in other East European countries where private farming is mostly conducted part-time. Private farmers account for one-half of the poultry and 40 percent of the pork produced in Hungary, and one-half of the potatoes in Bulgaria. Private farmers are significant meat, vegetable, and fruit producers in all East European countries. The

respective governments have stimulated private production through credits, providing breeding stock, assisting in marketing, and making tools and small machinery available for purchase. Discriminatory input pricing practices of charging more to private farmers than to socialized enterprises were stopped.

In Poland, the Government modified the pension law to demonstrate its support for private farming. Until 1980, private farmers at age 65 (women at 60) became eligible for pensions if they ceded their farms to the Government. The modified law permits farmers to donate their land to an inheritor free of charge in exchange for a pension. The new owner must cultivate the land properly to gain a title. Despite this action, farmers remained suspicious about the long-term prospect for private farming. Farmers' representatives joined with the representatives of the Solidarity trade union movement to obtain guarantees from the Government for permanent individual land-ownership and easier access to inputs and supplies. The "Solidarity movement" included in its demands from the Government:

The creation of lasting prospects for developing peasant farms; equal access for all agricultural sectors to all means of production, including land; and the creation of conditions for rural self-government.

The Polish Supreme Court rejected the farmers' request to form their own union and instead approved the creation of associations, a less powerful organization. In January 1981, a Polish Government-sponsored "Commission for Economic Reform" included many demands of the farmers in their recommended policy guidelines such as:

Creation and maintenance of a climate of stability accepting private farm ownership as permanent; giving opportunity for enlarging private farms; ensuring access to purchase the necessary means for production; eliminating gradually production controls; influencing farmers with a loan and price policy; developing farmers' self government; and permitting small producers free marketing of goods and services.

The Polish Government embraced many of the Commission's recommendations. High officials promised that: any increase in domestic fertilizer production will

be directed to the private sector; the production of large machinery destined to the state sector will be reduced in favor of increasing the output of small machinery and implements for use in the private sector; and the barriers to land purchase from the State Land Fund for private farmers will be eliminated.

In Yugoslavia the 10 to 15 ha. limit on farm holdings constrained improvement in production efficiency. Often the small holdings are scattered around the village where the farmers live. A land consolidation program, however, is progressing slowly because there is no consensus among farmers on the conditions for exchanging property.

## Slowdown in Growth Planned in 1981

The macroeconomic plan indicators call for slower growth rates in 1981 than in 1980. The GDR is the only exception. The 1981 growth targets for national income and industrial and agricultural production are the highest in Romania, but even there no growth is planned for capital investments. A decline in investments from last year's level is planned in Poland, Hungary, and Yugoslavia. In all countries, a larger proportion of national income than in the past will be used for consumption. New labor entering the workforce will level off. This new entry is expected to satisfy the needs of the industrial sector, consequently industry is not expected to drain labor from the farm sector. If the agricultural labor force stabilizes, all investments can be allocated for improving the stage of mechanization, and for new construction and repair, rather than for substituting manpower.

Poland and Romania, where agricultural production declined most sharply in 1980, plan the fastest agricultural recovery in 1981. But Bulgaria and Yugoslavia also have ambitious growth targets. Few structural changes in cropping patterns are expected. A slight shift toward grains and industrial crops may occur at the expense of forage crops. The livestock inventory is to be stabilized in Czechoslovakia, the GDR, and Hungary with particular emphasis on improving productivity in the cattle sector. Poland is determined to rebuild its livestock inventory which was depleted in 1980 because of the feed shortage. (Thomas A. Vankai)

## 1981 OUTLOOK

All East European governments place a high priority on grain production. Grain for food and feed is closely tied to the living standard, thus it is politically desirable to assure an adequate grain supply. Although Bulgaria and Poland each plan to increase area sown to grain by 100,000 hectares in 1981, a better prospect for increased production lies in raising yields.

Higher yields are to be generated through wider use of new and better seed varieties, through expanding irrigation, and improving production technology. Bulgaria is going to shift gradually to corn hybrids, which bring

higher yields and have a longer vegetation period. The higher yielding varieties presently sown on one-third of the corn area should occupy 44 percent in a few years. However, little has been said about increasing the application of fertilizers and plant protection agents during the 1980/81 crop year.

Fall sowing in 1980 was delayed due to late harvesting, with Poland and Yugoslavia falling furthest behind. Because of this delay, about 8 percent of the grain intended for sowing last fall will have to be sown this spring.



All East European governments announced producer price increases effective for crops to be harvested in 1981. These increases are intended to offset rising production costs and stimulate interest in grain cultivation.

In Bulgaria, wheat prices were raised 39 percent and corn prices 6 percent. The GDR increased rye prices 12.5 percent. Yugoslavia increased wheat prices 20 percent to improve the wheat-corn price ratio thereby making wheat needed for bread costly for feed use. In Romania, the crop price increases averaged 12 percent and in Poland 33 percent. No breakdown of prices is yet available for individual commodities in these countries. With the help of these price incentives, the 1981 grain harvest is expected to be within 5 percent of the average production in the past five years.

Prospects for 1980 winter grain production are mixed. No above-normal freeze damage has been reported but significant sowing delays occurred in the fall of 1980. The southern countries should be able to make up a good part of the lost output potential by increasing area sown to high-yielding corn this spring. However, the northern countries will not be able to fully recover output potential as lower yielding wheat and barley are sown in the spring than in the fall.

Rapeseed sowing in 1980 was also hindered by harvesting delays and area sown declined from the year before. However, winter weather was favorable and rapeseed output in 1981 could be above 1980's level with normal growing conditions. Indications are that area sown to sunflower this year may be a record.

The outlook for sugarbeets in 1981 is good. Romania and Yugoslavia have increased producer prices to raise production and planted hectares will increase in Czechoslovakia, the GDR, Hungary, and Poland. Potato output will be constrained by a shortage of quality seed potatoes and smaller planted area is expected in several countries, including Poland. Tobacco output should increase with a return to normal weather plus higher producer prices in Poland and Yugoslavia.

Growth in the livestock sector will depend on the domestic feed base and the supply of hard currency to finance feed imports. In line with these constraints, herd increases are planned only in Bulgaria, Romania, and Yugoslavia. It will be several years before Poland will be able to rebuild herds drawn down in 1980.

Any improvement in livestock productivity will have to be achieved via improvement in the domestic stock as foreign exchange shortages rule out large-scale foreign breed imports. Therefore, the local stock will be upgraded

through crossbreeding and artificial insemination with imported semen.

The rate of growth in the production of livestock products will depend on increased efficiency in feed utilization and feed conversion to meat. Despite priorities given the cattle sector, beef production is not likely to grow significantly this year because of the relatively slow reproduction cycle of cattle.

The slow growth of meat production will retard the growth of per capita meat consumption. In Poland, per capita meat consumption is expected to decline from the estimated 72.5 kg. in 1980 to about 65 kg. this year. This would be a significant decline in a region where the level of meat availability is an important factor in judging one's standard of living.

No significant change in the East European grain trade pattern is expected on the basis of 1980 harvest results and the January 1981 livestock inventory. Following the relatively good East European grain crop, Czechoslovakia, the GDR, and Yugoslavia are likely to reduce imports somewhat and Hungary to increase exports. The other countries may maintain or increase their imports slightly.

Stagnation in the growth of livestock herds and increasing balance of payments constraints in many countries are likely to result in only a small increase in imports of oilmeal in 1981. The country most likely to increase its oilmeal imports is Romania. Because of increased Brazilian export supplies, the U.S. share of the total East European oilmeal market could suffer, with actual exports possibly declining from the 1980 figure. However, Poland and Romania are expected to show the strongest growth in U.S. oilmeal imports in 1981.

Total imports of soybeans in 1981 could fall, depending on how extensively Romania shifts its imports toward soybean meal. Because of greater rapeseed supplies, Poland also is expected to take fewer soybeans this year. Yugoslavia, on the other hand is to open its second major crushing facility at Becej this fall with an annual capacity of 160,000 tons. If capacity is to be fully utilized, most of this amount will have to be met through imports. In the short run though, difficulties in arranging financing could continue to retard the expansion of Yugoslav soybean imports.

The longer term outlook is for further growth in oilmeal consumption and imports of meal and seeds as the region continues to upgrade feeding practices. Likely increases in domestic availability should be less than increases in demand. (Robert Cummings)

Table 1--Production of grains, Eastern Europe, annual 1971-80 1/

[illegible]

--Continued



Table 1--Production of grains, Eastern Europe, annual 1971-80 1/

[illegible]

-- = No information reported, negligible, or none.

( ) = Estimates.

1/ 1980 data are preliminary; they are slightly changed since the April 13 USDA estimates.

2/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 2--Area of grains, Eastern Europe, annual 1971-80 1/

Commodity : and year	Bulgaria :	Czecho- slovakia :	GDR :	Hungary :	Poland :	Romania :	Yugo- slavia :	Total Eastern Europe
				<u>1,000 hectares</u>				
Wheat:	:	:	:	:	:	:	:	:
1971	: 1,013	1,103	633	1,273	2,060	2,501	1,929	10,512
1972	: 961	1,197	690	1,317	2,048	2,523	1,924	10,666
1973	: 934	1,235	696	1,294	1,962	2,358	1,697	10,176
1974	: 904	1,276	728	1,324	2,022	2,389	1,842	10,485
1975	: 912	1,183	688	1,251	1,842	2,345	1,615	9,836
1976	: 918	1,278	762	1,325	1,832	2,388	1,723	10,226
1977	: 910	1,287	732	1,311	1,834	2,269	1,604	9,947
1978	: 935	1,274	686	1,324	1,852	2,284	1,712	10,067
1979	: 958	1,111	712	1,135	1,549	2,100	1,524	9,089
1980	: 968	1,197	707	1,276	1,609	2,244	1,516	9,517
Rye:	:	:	:	:	:	:	:	:
1971	: 19	234	668	127	3,711	48	110	4,917
1972	: 17	232	646	119	3,543	42	104	4,703
1973	: 16	225	646	107	3,416	34	96	4,540
1974	: 15	219	637	106	3,138	(40)	91	4,246
1975	: 17	191	593	104	2,792	(40)	84	3,821
1976	: 13	186	600	93	2,934	(40)	76	3,941
1977	: 13	212	619	91	3,116	(40)	69	4,160
1978	: 13	187	652	78	3,030	(40)	63	4,063
1979	: 16	166	678	69	2,868	(40)	59	3,896
1980	: 20	179	678	74	3,039	35	55	4,080
Barley:	:	:	:	:	:	:	:	:
1971	: 434	851	656	298	899	330	280	3,748
1972	: 446	854	618	291	1,016	327	290	3,842
1973	: 458	873	692	287	1,083	315	328	4,036
1974	: 477	867	779	271	1,230	402	330	4,356
1975	: 575	980	929	257	1,335	442	360	4,878
1976	: 524	857	960	228	1,210	410	293	4,482
1977	: 529	856	997	224	1,235	595	306	4,742
1978	: 473	919	1,035	225	1,202	722	273	4,849
1979	: 472	1,042	945	262	1,470	772	291	5,254
1980	: 415	921	969	246	1,322	819	324	5,016
Oats:	:	:	:	:	:	:	:	:
1971	: 75	344	230	45	1,330	128	265	2,407
1972	: 65	323	247	48	1,359	121	256	2,419
1973	: 46	278	238	37	1,271	105	251	2,226
1974	: 47	226	222	33	1,182	85	249	2,044
1975	: 50	221	243	45	1,291	70	270	2,190
1976	: 44	198	190	39	1,115	45	232	1,863
1977	: 57	174	153	32	1,097	54	231	1,798
1978	: 51	151	153	27	1,030	48	210	1,670
1979	: 53	149	136	44	1,094	60	209	1,745
1980	: 41	139	155	36	997	51	194	1,613

--Continued



Table 2--Area of grains, Eastern Europe, annual 1971-80 1/

[illegible]

-- = No information reported, negligible, or none.

( ) = Estimates

1/ 1980 data are preliminary; they are slightly changed since the April 13 USDA estimates.

2/ Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 3--Grain trade,

Commodity and country	Imports								
	1971	1972	1973	1974	1975	1976	1977	1978	1979
	1,000 metric tons								
Total grains:									
Bulgaria	: 193	1	140	643	659	439	194	648	908
Czechoslovakia	: 2,226	1,718	1,737	1,171	970	2,187	1,207	936	2,085
GDR	: 2,815	3,820	3,074	2,821	3,422	5,067	2,733	3,498	3,717
Hungary	: 832	800	282	408	189	233	314	428	326
Poland	: 3,023	3,194	3,317	4,155	4,025	6,131	5,754	7,366	7,338
Romania	: 603	459	392	1,210	1,230	1,670	1,328	1,195	1,506
Yugoslavia	: 1,032	990	283	986	22	883	566	131	1,573
Total	: 10,724	10,982	9,225	11,394	10,508	16,610	12,096	14,202	17,453
Wheat:									
Bulgaria	: 150	--	--	77	105	32	119	59	379
Czechoslovakia	: 1,318	1,193	1,066	671	525	689	374	257	736
GDR	: 1,867	2,040	1,594	1,219	1,130	1,691	1,100	687	811
Hungary	: 401	35	--	2	30	33	4	--	2
Poland	: 1,910	1,274	1,620	1,758	1,477	2,311	2,599	2,311	2,927
Romania	: 334	29	184	302	402	989	540	300	101
Yugoslavia	: 547	448	225	845	--	864	521	3	417
Total	: 6,527	5,019	4,689	4,874	3,669	6,609	5,257	3,617	5,373
Barley:									
Bulgaria	: 8	--	53	201	278	1	3	62	299
Czechoslovakia	: 133	112	132	90	82	158	272	20	11
GDR	: 187	675	298	104	390	796	581	806	1,161
Hungary	: 209	548	199	333	101	153	31	95	287
Poland	: 616	1,332	780	1,135	1,376	742	1,268	2,413	1,498
Romania	: 208	218	50	216	53	20	23	150	165
Yugoslavia	: 125	66	10	5	15	--	10	11	53
Total	: 1,486	2,951	1,522	2,084	2,295	1,870	2,188	3,557	3,474
Corn:									
Bulgaria	: 33	--	68	359	222	375	61	519	225
Czechoslovakia	: 480	302	469	332	283	1,260	471	590	1,206
GDR	: 656	1,031	1,086	1,328	1,795	2,346	940	1,229	1,201
Hungary	: 162	107	2	6	2	20	248	284	--
Poland	: 267	337	684	765	634	2,035	1,401	1,807	2,128
Romania	: --	183	77	652	595	102	300	310	1,023
Yugoslavia	: 308	417	42	81	--	--	--	106	1,094
Total	: 1,906	2,377	2,428	3,523	3,531	6,138	3,421	4,845	6,877
Other coarse grains 1/:									
Bulgaria	: --	--	15	--	49	24	--	--	--
Czechoslovakia	: 215	41	--	4	9	--	6	--	46
GDR	: 61	30	45	119	69	192	67	733	500
Hungary	: 42	100	67	55	42	14	4	20	16
Poland	: 156	181	179	434	464	924	429	756	697
Romania	: --	--	11	--	118	501	427	373	150
Yugoslavia	: 26	51	1	9	2	9	5	3	1
Total	: 500	403	318	621	753	1,664	938	1,885	1,410
Rice:									
Bulgaria	: 2	1	4	6	5	7	9	8	5
Czechoslovakia	: 80	70	70	74	71	80	84	69	86
GDR	: 44	44	51	51	38	42	45	43	44
Hungary	: 18	10	14	12	14	13	27	29	21
Poland	: 74	70	54	63	74	119	57	79	88
Romania	: 61	29	70	40	62	58	38	62	67
Yugoslavia	: 26	8	5	46	5	10	32	8	8
Total	: 305	232	268	292	269	329	292	298	319

Footnotes and sources at end of table 6.



Exports									Commodity and country
1971	1972	1973	1974	1975	1976	1977	1978	1979	
1,000 metric tons									
									:Total grains:
558	834	367	149	195	452	446	202	396	: Bulgaria
35	35	33	207	73	197	34	33	14	: Czechoslovakia
390	325	343	312	410	386	329	339	382	: GDR
144	539	1,732	1,836	1,266	1,693	1,035	874	645	: Hungary
95	208	410	262	104	70	22	6	67	: Poland
702	900	1,126	712	1,163	1,633	2,052	1,853	629	: Romania
70	22	389	343	68	485	335	248	22	: Yugoslavia
1,994	2,863	4,400	3,821	3,279	4,916	4,253	3,555	2,155	: Total
									:Wheat:
324	509	220	139	113	253	271	201	396	: Bulgaria
--	--	--	--	--	--	--	--	1	: Czechoslovakia
160	61	82	68	73	75	55	60	55	: GDR
95	369	925	934	922	707	790	560	541	: Hungary
--	--	--	--	--	--	--	--	--	: Poland
236	543	776	641	705	1,385	1,652	863	166	: Romania
2	--	--	4	--	--	5	78	2	: Yugoslavia
817	1,482	2,003	1,786	1,813	2,420	2,771	1,762	1,161	: Total
									:Barley:
--	40	16	--	--	44	2	--	--	: Bulgaria
33	35	33	33	48	183	34	33	13	: Czechoslovakia
164	167	173	152	62	162	105	137	179	: GDR
--	122	88	14	--	1	9	2	4	: Hungary
78	129	43	68	29	49	22	--	10	: Poland
--	--	--	--	--	--	--	--	72	: Romania
1	--	103	33	11	9	--	--	--	: Yugoslavia
276	493	456	300	150	448	172	172	278	: Total
									:Corn:
230	285	130	10	82	155	173	--	--	: Bulgaria
--	--	--	--	--	--	--	--	--	: Czechoslovakia
--	--	--	--	--	--	--	--	--	: GDR
49	44	714	848	344	966	216	298	89	: Hungary
--	--	--	--	--	--	--	--	--	: Poland
466	357	350	71	458	248	400	990	390	: Romania
63	20	277	291	52	459	326	168	20	: Yugoslavia
808	706	1,471	1,220	936	1,828	1,115	1,456	499	: Total
									:Other coarse grains: <sup>1/</sup>
4	--	1	--	--	--	--	1	--	: Bulgaria
2	--	--	174	25	15	--	--	--	: Czechoslovakia
66	97	88	92	275	149	169	142	148	: GDR
--	4	5	40	--	19	20	14	11	: Hungary
17	79	367	194	75	21	--	6	57	: Poland
--	--	--	--	--	--	--	--	--	: Romania
4	2	9	15	5	18	4	2	--	: Yugoslavia
93	182	470	515	380	222	193	165	216	: Total
									:Rice:
--	--	--	--	--	--	--	--	--	: Bulgaria
--	--	--	--	--	--	--	--	--	: Czechoslovakia
--	--	--	--	--	--	--	--	--	: GDR
--	--	--	--	--	--	--	--	--	: Hungary
--	--	--	--	--	--	--	--	--	: Poland
--	--	--	--	--	--	--	--	--	: Romania
--	--	--	--	--	--	--	--	--	: Yugoslavia
--	--	--	--	--	--	--	--	--	: Total

Table 4--Production of selected crops, Eastern Europe, annual 1971-80 1/[illegible]

--Continued



Table 4--Production of selected crops, Eastern Europe, annual 1971-80 1/

[illegible]

-- = No information reported, negligible, or none.  
( ) = Estimates.

1/ 1980 data are preliminary.

2/ Derived figure.

3/ Includes only lucerne, clover and vetch.

Table 5--Area of selected crops, Eastern Europe, annual 1971-80 1/

[illegible]

--Continued



Table 5--Area of selected crops, Eastern Europe, annual 1971-80 1/

[illegible]

-- = No information reported, negligible, or none.

1/ 1980 data are preliminary.

2/ Includes only lucerne, clover and vetch.

Table 6--Trade in selected agricultural

Commodity and country	Imports									
	1971	1972	1973	1974	1975	1976	1977	1978	1979	
	1,000 metric tons									
Oilseeds: <u>2/</u>										
Bulgaria	--	--	--	--	1	1	1	--	36	
Czechoslovakia	141	115	147	139	132	148	149	116	170	
GDR	177	165	117	116	112	38	40	61	51	
Hungary	57	1	1	1	1	3	2	--	22	
Poland	74	109	147	203	125	84	10	131	211	
Romania	20	19	20	20	20	221	116	310	329	
Yugoslavia	45	2	--	38	4	27	78	224	253	
Total	514	411	432	517	395	522	396	842	1,072	
Vegetable oil, edible:										
Bulgaria	1	--	--	--	2	2	--	--	--	
Czechoslovakia	55	58	40	46	49	53	44	50	51	
GDR	99	161	98	127	97	104	111	132	106	
Hungary	30	7	21	20	17	17	15	14	12	
Poland	65	69	66	68	61	87	79	57	64	
Romania	1	1	1	5	7	10	6	3	4	
Yugoslavia	134	128	48	59	130	106	51	10	11	
Total	385	424	274	325	363	379	306	266	248	
Oilseed meal:										
Bulgaria	137	179	170	302	218	256	214	181	136	
Czechoslovakia	351	498	604	564	616	671	592	606	593	
GDR	637	834	769	829	875	875	998	941	986	
Hungary	368	377	376	577	505	541	594	692	622	
Poland	317	545	719	794	948	1,024	1,051	1,088	1,274	
Romania	51	117	215	227	273	320	240	270	270	
Yugoslavia	188	150	200	272	150	246	211	163	90	
Total	2,049	2,700	3,053	3,565	3,585	3,934	3,900	3,941	3,971	
Cotton:										
Bulgaria	62	56	61	58	51	48	61	55	56	
Czechoslovakia	106	108	104	119	116	95	117	96	122	
GDR	91	91	86	99	100	79	102	86	84	
Hungary	66	72	73	74	93	87	68	99	96	
Poland	145	157	145	152	160	145	176	159	163	
Romania	91	97	108	104	111	108	101	119	109	
Yugoslavia	79	86	94	109	85	103	103	123	98	
Total	640	667	671	715	716	665	728	737	728	
Hides, cattle:										
Bulgaria	6	8	7	10	7	7	4	5	7	
Czechoslovakia <u>3/</u>	50	48	65	48	47	49	50	53	(53)	
GDR	16	17	23	14	14	15	17	15	19	
Hungary	23	24	28	29	26	24	35	34	29	
Poland	45	53	61	52	47	35	45	44	42	
Romania	34	46	40	40	37	49	36	40	54	
Yugoslavia	20	23	20	23	22	26	38	21	21	
Total	194	219	244	216	200	205	225	212	225	

See footnotes and sources at end of table.



## commodities, Eastern Europe, 1971-79

Exports										Commodity and country
1971	1972	1973	1974	1975	1976	1977	1978	1979		
1,000 metric tons										
									Oilseeds: <u>2/</u>	
91	92	33	10	4	11	30	13	40	Bulgaria	
1	4	3	2	1	1	6	--	--	Czechoslovakia	
--	--	--	9	8	13	15	10	22	GDR	
51	36	27	32	47	42	57	90	133	Hungary	
52	1	53	--	74	173	78	4	--	Poland	
10	50	19	35	15	5	11	1	2	Romania	
25	13	5	20	1	1	--	1	68	Yugoslavia	
230	196	140	108	150	246	197	119	265	Total	
									Vegetable oil, edible:	
20	26	19	23	21	23	21	7	15	Bulgaria	
8	1	1	1	1	1	3	2	--	Czechoslovakia	
--	--	--	--	--	--	--	--	--	GDR	
44	41	41	39	38	39	50	57	49	Hungary	
17	62	47	47	57	76	101	61	39	Poland	
132	129	142	165	141	87	158	131	146	Romania	
6	1	3	7	--	--	2	13	40	Yugoslavia	
227	260	253	282	258	226	335	271	289	Total	
									Oilseed meal:	
--	--	--	--	--	--	--	--	--	Bulgaria	
14	29	27	27	35	11	22	46	--	Czechoslovakia	
--	--	--	--	--	--	--	--	--	GDR	
--	--	--	--	--	--	--	--	--	Hungary	
30	14	--	6	4	2	18	4	4	Poland	
--	--	--	--	--	--	--	--	--	Romania	
--	--	--	--	--	--	--	--	--	Yugoslavia	
44	43	27	33	39	13	40	50	4	Total	
									Cotton:	
9	10	6	2	1	2	3	1	3	Bulgaria	
--	--	--	--	--	4	--	--	--	Czechoslovakia	
--	--	--	--	--	--	--	--	--	GDR	
--	--	--	--	--	--	--	--	--	Hungary	
--	--	--	--	--	--	--	--	--	Poland	
--	--	--	--	--	--	--	--	--	Romania	
--	--	--	--	--	--	--	--	--	Yugoslavia	
9	10	6	2	1	6	3	1	3	Total	
									Hides, cattle:	
3	--	--	--	--	--	--	--	--	Bulgaria <u>3/</u>	
--	--	--	--	--	--	--	--	--	Czechoslovakia <u>3/</u>	
--	--	--	--	--	--	--	--	--	GDR	
--	--	--	--	--	--	--	--	--	Hungary	
3	3	2	2	3	--	2	--	--	Poland	
--	--	--	--	--	--	--	--	--	Romania	
--	--	--	--	--	--	--	--	--	Yugoslavia	
6	3	2	2	3	--	2	--	--	Total	

--Continued

Table 6--Trade in selected agricultural

Commodity and country	Imports									
	1971	1972	1973	1974	1975	1976	1977	1978	1979	
	<u>1,000 metric tons</u>									
Meat and meat products: <u>4/</u>										
Bulgaria	15	10	15	39	19	17	11	8	3	
Czechoslovakia	76	46	22	41	32	22	31	23	22	
GDR	56	47	43	25	23	20	30	21	20	
Hungary	16	14	27	19	12	27	10	6	10	
Poland	153	65	55	6	16	46	104	33	2	
Romania	46	43	8	10	3	11	3	36	50	
Yugoslavia	5	11	46	20	8	10	28	39	48	
Total	367	236	216	160	113	153	217	166	155	
Sugar: <u>5/</u>										
Bulgaria	305	160	232	212	295	239	214	226	224	
Czechoslovakia	197	143	148	165	48	109	64	80	94	
GDR	433	331	260	285	166	189	234	213	223	
Hungary	198	145	174	226	198	151	91	59	80	
Poland	44	37	29	50	41	16	30	60	62	
Romania	129	82	80	88	21	129	222	--	123	
Yugoslavia	156	295	463	119	119	342	85	--	--	
Total	1,462	1,193	1,386	1,145	888	1,175	940	638	806	
Tobacco:										
Bulgaria	6	12	5	7	9	4	5	8	8	
Czechoslovakia	17	21	18	16	14	15	16	29	20	
GDR	19	23	18	20	20	16	18	19	20	
Hungary	8	9	9	9	8	7	9	6	4	
Poland	3	3	7	4	10	11	7	8	13	
Romania	5	2	2	7	2	2	1	1	--	
Yugoslavia	5	6	2	2	6	2	4	3	4	
Total	63	76	61	65	69	57	60	74	69	



commodities, Eastern Europe, 1971-79

Exports										Commodity and country
1971	1972	1973	1974	1975	1976	1977	1978	1979		
:	:	:	:	:	:	:	:	:	:	
1,000 metric tons										
67	74	65	61	99	118	106	98	102		Meat and meat products: <u>4/</u>
30	25	50	9	16	12	10	22	60		Bulgaria
60	71	68	39	69	134	121	152	134		Czechoslovakia
162	163	134	201	249	210	293	265	310		GDR
174	173	194	234	209	157	142	153	167		Hungary
55	69	111	133	165	165	194	194	158		Poland
102	108	91	57	85	89	62	77	80		Romania
650	683	713	734	892	885	928	925	1,078		Yugoslavia
										Total
										Sugar: <u>5/</u>
36	--	--	--	--	--	9	--	--		Bulgaria
325	226	225	189	227	72	171	300	249		Czechoslovakia
144	158	120	186	64	67	92	82	77		GDR
2	2	2	13	7	1	2	12	35		Hungary
98	352	425	180	73	354	272	285	105		Poland
11	170	--	116	28	--	174	92	7		Romania
--	--	--	7	2	--	1	--	71		Yugoslavia
616	908	772	691	401	494	721	771	544		Total
										Tobacco:
62	63	69	69	71	70	70	62	72		Bulgaria
--	3	1	2	2	1	--	2	--		Czechoslovakia
2	2	2	2	2	2	2	2	2		GDR
6	3	2	1	1	1	1	1	1		Hungary
12	9	12	13	10	10	10	9	9		Poland
1	3	6	6	9	10	8	6	5		Romania
20	17	18	19	25	25	19	27	26		Yugoslavia
103	100	110	112	118	119	110	109	115		Total

-- = No information reported, negligible, or none.

1/ Rye, oats, and grain sorghum.

2/ Flaxseed, rapeseed, soybeans, and sunflowerseed.

3/ Converted from pieces to metric tons at 22 kilograms per piece.

4/ Includes poultry meat.

5/ Raw basis.

Sources: Statistical yearbooks of respective countries, CEMA Yearbook, FAO Trade Yearbook, Statistical yearbooks of trading partners.

Table 7--January livestock numbers, Eastern Europe, 1971-81 1/[illegible]

--Continued



Table 7-January livestock numbers, Eastern Europe, 1971-81 1/

[illegible]

( ) = Estimate.

1/ 1981 data are preliminary.

Table 8--Production of principal livestock products, Eastern Europe, annual 1971-80 1/[illegible]

See footnotes at end of table.

--Continued



Table 8--Production of principal livestock products, Eastern Europe, annual 1971-80 1/

[illegible]

1/ 1980 data are preliminary.

2/ Data include edible slaughter fat and offal.

3/ Includes horse and rabbit meat, CEMA data except for Yugoslavia.

4/ Data include only cows milk for consumption in Romania and Yugoslavia for the entire series, and in Hungary since 1975. In the remaining countries data include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent. One liter is equal to 1.031 kilograms.

Table 9--Per capita consumption of selected foods, Eastern Europe, 1971-80

Commodity and country	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania <u>1/</u>	Yugo- slavia
Total meat:							
1971	43.6	73.7	68.5	59.5	56.1	--	37.6
1972	49.0	75.8	70.8	61.5	59.3	--	37.8
1973	50.0	76.7	73.5	63.7	62.1	--	38.5
1974	51.6	78.4	75.3	66.2	65.6	--	43.7
1975	58.0	81.1	77.8	68.5	70.3	45.7	48.3
1976	62.0	81.0	80.9	67.5	70.0	--	48.4
1977	59.3	81.4	83.5	68.9	69.1	51.9	49.4
1978	61.1	83.2	86.1	71.2	70.6	--	(51.6)
1979	62.1	(84.0)	88.3	70.5	73.0	(62.0)	(50.0)
1980	(62.5)	(85.0)	--	(70.6)	(72.5)	--	(49.0)
Eggs: <u>2/</u>							
1971	127	284	246	258	193	--	145
1972	126	273	240	260	196	--	149
1973	135	293	250	264	200	--	154
1974	140	293	264	270	205	--	162
1975	146	297	269	274	209	214	166
1976	149	294	274	270	214	--	164
1977	171	308	274	308	214	238	180
1978	197	311	282	314	219	--	199
1979	187	310	284	324	221	(270)	206
1980	(196)	--	--	--	--	--	--
Vegetable oil:							
1971	13.0	6.0	2.2	1.9	5.8	--	10.6
1972	12.9	6.1	2.3	2.2	5.8	--	9.7
1973	13.0	6.1	2.0	2.5	6.2	--	10.1
1974	13.7	6.1	2.0	2.8	6.5	--	10.8
1975	14.1	6.7	2.0	2.9	6.5	--	10.6
1976	14.1	6.8	2.5	3.3	6.8	--	10.5
1977	14.5	6.8	1.9	3.6	7.1	--	10.8
1978	14.6	7.0	1.8	3.8	7.0	--	10.5
1979	15.1	7.0	1.8	--	7.0	--	--
1980	--	--	--	--	--	--	--
Sugar:							
1971	33.0	37.5	34.4	34.5	39.6	--	28.5
1972	31.6	37.7	35.5	35.5	40.9	--	29.1
1973	33.0	38.6	35.1	37.1	42.0	--	29.4
1974	33.2	38.6	36.9	37.7	43.9	--	33.1
1975	32.5	38.0	36.8	39.5	43.2	20.3	32.8
1976	34.5	38.2	38.6	33.0	43.9	--	32.8
1977	34.0	35.6	37.8	34.9	41.5	25.2	32.8
1978	35.0	38.3	39.3	36.4	42.7	--	32.0
1979	34.2	38.5	40.8	36.0	43.9	(28.0)	--
1980	--	--	--	--	--	--	--

See footnotes at end of table.

--Continued



Table 9--Per capita consumption of selected foods, Eastern Europe, 1971-80

[illegible]

-- = No information reported, negligible, or none.

( ) = Estimate.

1/ Revista Economica, December 29, 1978.

## 2/ Numbers.

3/ Polish series revised beginning with 1975.

Table 10--Total and agricultural trade, Eastern Europe, 1975-80

[illegible]

1/ United Nation's data.

2/ Preliminary.

3/ FAO data.



Table 11-- Trade with CEMA countries, percent of total and value, Eastern Europe, 1975-79

[illegible]

1/ Yugoslav dinar figures converted to rubles at official Yugoslav rates: 1975 and 1976, 1 ruble = 17 dinars; 1977-1979, 1 ruble = 19 dinars.

SOURCE: CEMA Yearbook and Yugoslav Trade Yearbook, various issues.

Table 12--Volume and value of U.S. agricultural exports

Commodity and country	1974	1975	1976	1977	1978	1979	1980 2/
	<u>1,000 metric tons</u>						
Wheat:							
Bulgaria	--	--	--	--	--	--	--
Czechoslovakia	--	9	143	--	--	442	239
GDR	11	335	719	84	219	196	252
Hungary	--	--	--	--	--	--	--
Poland	199	502	698	637	584	817	349
Romania	--	86	427	171	--	81	540
Yugoslavia	146	--	--	--	--	406	844
Total	356	932	1,987	892	803	1,942	2,224
Feed grains:							
Bulgaria	64	115	246	3	226	42	635
Czechoslovakia	5	--	769	81	398	810	735
GDR	1,164	1,626	2,158	1,248	925	1,702	2,868
Hungary	--	--	--	112	106	1	1
Poland	697	1,471	2,101	1,496	2,063	2,449	2,549
Romania	512	534	239	242	327	917	1,378
Yugoslavia	52	--	--	--	269	1,092	--
Total	2,494	3,746	5,513	3,182	4,314	7,013	8,166
Total grains: 3/							
Bulgaria	64	115	246	3	226	42	635
Czechoslovakia	5	10	912	81	398	1,252	974
GDR	1,175	1,961	2,877	1,332	1,145	1,898	3,120
Hungary	--	--	--	112	107	1	1
Poland	923	1,983	2,811	2,133	2,683	3,301	2,915
Romania	512	620	666	413	327	998	1,918
Yugoslavia	198	--	--	--	269	1,498	844
Total	2,877	4,689	7,512	4,074	5,155	8,990	10,407
Soybeans:							
Bulgaria	--	--	--	1	--	--	--
Czechoslovakia	13	5	1	3	20	3	1
GDR	58	--	--	12	6	3	2
Hungary	--	--	--	--	--	--	--
Poland	126	120	56	--	151	200	263
Romania	--	16	220	137	244	260	248
Yugoslavia	--	--	1	96	186	275	218
Total	197	141	278	249	607	741	732
Vegetable oil:							
Bulgaria	--	--	--	--	--	--	--
Czechoslovakia	--	--	--	--	--	--	--
GDR	--	--	6	1	--	--	--
Hungary	--	--	--	--	--	--	--
Poland	9	12	10	--	18	37	12
Romania	--	--	--	--	--	--	--
Yugoslavia	40	49	--	--	--	--	20
Total	49	61	16	1	18	37	32

Footnotes and sources at end of table.

to Eastern Europe, including transshipments, 1974-80 1/

1974	1975	1976	1977	1978	1979	1980 <u>2/</u>	Commodity and country
<u>1,000 U.S. dollars</u>							
--	--	--	--	--	--	--	Wheat:
--	1,576	21,400	30	--	78,690	44,600	Bulgaria
2,244	58,074	106,275	9,539	28,129	35,262	49,500	Czechoslovakia
--	--	--	--	--	--	--	GDR
18,589	80,296	101,640	59,172	68,041	120,286	66,200	Hungary
--	11,793	48,453	15,969	--	12,510	92,300	Poland
24,395	--	--	--	--	68,848	140,500	Romania
45,228	151,739	277,768	84,710	96,170	315,595	393,100	Yugoslavia
							Total
9,995	14,780	28,456	173	24,846	5,515	80,100	Feed grains:
672	39	91,450	8,875	44,598	98,418	98,300	Bulgaria
149,918	229,950	253,253	125,042	94,122	222,001	406,200	Czechoslovakia
--	--	--	12,937	11,865	666	800	GDR
86,651	185,606	252,237	142,414	209,515	282,111	333,200	Hungary
70,351	69,585	25,576	20,864	32,412	105,898	181,400	Poland
7,510	--	--	--	27,930	127,548	--	Romania
325,097	499,960	650,972	310,305	445,288	842,157	1,100,000	Yugoslavia
							Total
9,995	14,780	28,456	173	24,846	5,515	80,100	Total grains: <u>3/</u>
672	1,615	112,850	8,905	44,598	177,107	142,900	Bulgaria
152,162	288,024	359,528	134,581	122,251	257,269	455,700	Czechoslovakia
--	--	--	12,937	11,865	666	800	GDR
117,586	270,692	356,727	201,586	278,860	411,731	406,400	Hungary
70,351	81,378	74,029	36,833	32,412	118,408	273,700	Poland
31,905	--	--	--	27,930	196,396	140,500	Romania
382,671	656,489	931,590	395,015	542,762	1,167,092	1,500,100	Yugoslavia
							Total
--	--	--	285	--	--	--	Soybeans:
2,550	1,230	9,410	6,920	5,000	431	400	Bulgaria
11,282	--	--	3,090	1,460	1,083	400	Czechoslovakia
--	--	--	--	--	--	--	GDR
36,151	31,666	10,796	--	39,827	54,855	72,300	Hungary
--	3,506	45,282	38,646	54,629	73,947	61,800	Poland
--	314	210	23,476	48,478	78,477	60,400	Romania
49,983	36,716	65,698	72,417	149,394	208,793	195,300	Yugoslavia
							Total
--	--	--	--	--	--	--	Vegetable oil:
--	--	--	--	--	--	--	Bulgaria
--	--	4,149	720	--	--	--	Czechoslovakia
--	--	--	--	--	--	--	GDR
7,373	11,126	4,726	--	8,101	23,903	7,200	Hungary
--	--	--	--	--	--	--	Poland
24,963	34,570	--	--	--	--	12,200	Romania
32,336	45,696	8,875	720	8,101	23,903	19,400	Yugoslavia
							Total



Table 12 --Volume and value of U.S. agricultural exports

Commodity and country	1974	1975	1976	1977	1978	1979	1980 <u>2/</u>
	<u>1,000 metric tons</u>						
Soybean meal and cake							
Bulgaria	16	24	11	--	57	103	196
Czechoslovakia	165	305	475	341	130	243	218
GDR	216	298	230	414	261	458	362
Hungary	121	196	71	94	147	67	95
Poland	271	228	392	178	518	366	324
Romania	103	13	98	47	38	271	334
Yugoslavia	222	13	182	109	112	81	182
Total	1,114	1,077	1,459	1,183	1,263	1,589	1,711
Cotton, excluding linters							
Bulgaria	--	--	--	--	--	--	--
Czechoslovakia	--	--	--	--	--	--	--
GDR	--	--	--	--	--	--	--
Hungary	--	--	--	--	--	1	--
Poland	7	4	7	2	11	15	5
Romania	19	10	--	4	9	16	21
Yugoslavia	--	--	--	--	--	1	1
Total	26	14	7	6	20	33	27
Cattle hides <u>4/</u>							
Bulgaria	42	26	49	31	52	45	29
Czechoslovakia	635	877	678	680	586	685	315
GDR	2	15	9	43	39	33	43
Hungary	286	158	270	227	180	144	94
Poland	638	788	389	433	349	513	522
Romania	1,777	1,226	1,651	1,472	1,942	1,317	1,046
Yugoslavia	220	110	252	472	431	737	413
Total	3,600	3,200	3,298	3,358	3,579	3,474	2,462

to Eastern Europe, including transshipments, 1974-80 1/

1974	1975	1976	1977	1978	1979	1980 <u>2/</u>	Commodity and country
1,000 U.S. dollars							
3,181	3,544	1,590	--	11,637	23,314	47,900	: Soybean meal and cake:
33,290	50,824	81,131	72,946	25,797	57,155	46,300	: Bulgaria
45,966	51,964	41,795	96,358	54,831	109,898	75,700	: Czechoslovakia
26,226	34,090	14,521	23,505	32,362	16,364	27,200	: GDR
62,993	37,998	73,853	41,262	108,549	81,638	75,100	: Hungary
25,455	1,886	17,702	9,403	8,467	65,479	79,100	: Poland
48,155	2,327	29,057	22,834	22,586	18,979	45,400	: Romania
245,266	183,452	259,649	266,308	264,229	372,827	396,700	: Yugoslavia
							: Total
							: Cotton, excluding
--	--	--	--	--	--	--	: lintors:
--	--	--	--	--	--	--	: Bulgaria
--	--	--	--	--	--	--	: Czechoslovakia
--	--	--	--	25	1,737	--	: GDR
9,262	4,131	9,842	3,949	14,726	22,252	10,700	: Hungary
38,818	12,206	--	6,548	13,529	23,991	33,000	: Poland
--	--	--	--	--	1,775	500	: Romania
48,080	16,337	9,842	10,497	28,280	49,755	44,200	: Yugoslavia
							: Total
							: Cattle hides:
622	275	746	583	1,129	1,881	1,200	: Bulgaria
9,678	8,034	11,116	13,049	13,999	29,232	8,400	: Czechoslovakia
45	195	159	655	754	1,110	800	: GDR
4,213	1,432	3,486	4,349	4,066	5,375	2,200	: Hungary
9,739	7,425	6,292	9,106	8,320	19,574	19,500	: Poland
24,081	9,693	26,517	26,658	52,223	59,672	28,900	: Romania
4,212	1,548	5,080	10,925	3,586	15,125	4,900	: Yugoslavia
52,590	28,602	53,396	65,325	84,077	131,969	76,200	: Total
							: Other:
2,008	1,011	766	1,640	2,120	10,309	9,600	: Bulgaria
24,059	23,032	15,602	12,040	7,761	8,505	7,500	: Czechoslovakia
5,753	3,545	7,314	4,681	2,557	1,233	1,700	: GDR
6,746	4,122	4,435	8,252	3,780	3,354	3,400	: Hungary
26,056	21,528	29,212	43,236	53,584	55,753	31,200	: Poland
286	35	8,054	216	1,120	5,142	14,400	: Romania
6,493	4,665	5,361	13,704	8,268	13,583	19,200	: Yugoslavia
71,401	57,938	70,744	83,769	79,190	97,879	87,000	: Total
							: Total agricultural
							: exports:
15,806	19,610	31,558	2,681	39,732	41,019	138,900	: Bulgaria
70,249	84,735	230,109	113,860	97,155	272,429	205,500	: Czechoslovakia
215,208	343,728	412,945	240,085	181,853	370,593	534,300	: GDR
37,185	40,463	22,442	49,043	52,098	27,496	33,700	: Hungary
269,160	384,566	491,448	299,139	511,967	669,706	622,400	: Poland
158,991	108,704	171,584	118,304	162,380	346,639	490,900	: Romania
115,728	43,424	39,708	70,939	110,948	324,335	293,200	: Yugoslavia
882,327	1,025,230	1,399,794	894,051	1,156,133	2,052,217	2,318,900	: Total

NOTE: Columns may not sum to totals due to rounding.

1/ Including transshipments through Belgium, Canada, Netherlands, and West Germany.

2/ Preliminary.

3/ Includes rice.

4/ Thousand pieces.

SOURCES: United States Census Bureau; U.S. Foreign Agricultural Trade Statistical Report, USDA/ ESS/IED; Export Sales Report, USDA/OGSM.



Table 13--U.S. exports to Eastern Europe, total and agriculture's share, 1974-80

Country	1974	1975	1976	1977	1978	1979	1980	1981
<u>Million dollars</u>								
Bulgaria:								
Direct	22.3	29.8	43.3	23.9	48.2	56.5	160.8	
Transshipment	--	--	--	--	--	--	11.5	
Total	22.3	29.8	43.3	23.9	48.2	56.5	172.3	
Czechoslovakia:								
Direct	48.9	53.1	148.7	74.7	105.5	281.2	185.2	
Transshipment	39.6	49.5	106.4	62.8	20.0	14.4	50.9	
Total	88.5	102.6	255.1	137.5	125.5	295.6	236.1	
GDR:								
Direct	21.9	17.3	64.9	36.1	170.4	356.0	478.6	
Transshipment	196.8	333.2	354.7	208.7	27.9	33.5	81.0	
Total	218.7	350.5	419.6	244.8	198.3	389.5	559.6	
Hungary:								
Direct	56.4	76.2	63.1	80.6	98.5	77.9	80.0	
Transshipment	.6	--	--	14.8	--	3.0	9.2	
Total	57.0	76.2	63.1	95.4	98.5	80.9	89.2	
Poland:								
Direct	395.6	583.3	623.4	438.9	680.0	793.0	713.7	
Transshipment	14.7	15.8	10.2	4.1	17.0	18.0	50.9	
Total	410.3	599.1	633.6	443.0	697.0	811.0	764.6	
Romania:								
Direct	277.8	190.6	250.3	260.0	318.9	501.2	722.0	
Transshipment	2.6	7.7	--	--	13.8	10.1	28.3	
Total	280.4	198.3	250.3	260.0	332.7	511.3	750.3	
Yugoslavia:								
Direct	310.0	326.3	296.9	356.3	474.9	756.5	755.7	
Transshipment	--	--	2.2	--	--	39.9	15.7	
Total	310.0	326.3	299.1	356.3	474.9	796.4	771.4	
Eastern Europe:								
Direct	1,132.9	1,276.6	1,490.6	1,270.5	1,896.4	2,822.3	3,096.0	
Transshipment	254.3	406.2	473.5	290.4	78.7	119.0	247.6	
Total	1,387.2	1,682.8	1,964.1	1,560.9	1,975.1	2,941.3	3,343.6	
<u>Percent</u>								
Agriculture's share:								
in total exports								
Bulgaria	70.9	65.0	73.0	11.2	82.4	72.6	80.6	
Czechoslovakia	79.4	80.6	90.2	82.8	77.5	92.1	87.0	
GDR	98.4	98.1	98.4	98.1	91.7	95.1	95.5	
Hungary	65.2	51.7	35.5	51.4	52.9	34.0	37.7	
Poland	65.6	63.0	77.6	67.5	73.5	82.6	81.4	
Romania	56.7	54.8	68.6	45.5	48.8	67.8	65.4	
Yugoslavia	37.3	12.5	13.3	19.9	23.4	40.7	38.0	
Eastern Europe	63.6	61.0	71.3	57.3	58.5	69.8	69.4	

-- = None or negligible.

Sources: U.S. Foreign Agricultural Trade Statistical Report USDA/ESS. U.S. Export Sales, USDA/FAS.



Table 14-- Volume and value of U.S. agricultural imports from Eastern Europe, 1974-80

Commodities and country	1974	1975	1976	1977	1978	1979	1980
<u>1,000 metric tons</u>							
Processed meat:							
Bulgaria	0.1	0.2	--	--	--	--	--
Czechoslovakia	0.4	0.2	0.6	0.7	1.2	1.5	1.6
GDR	--	--	--	--	--	--	--
Hungary	3.6	4.6	6.7	7.0	8.2	8.2	7.8
Poland	29.4	38.3	38.1	34.1	39.0	43.3	42.5
Romania	4.9	3.6	5.5	6.0	7.4	8.8	6.9
Yugoslavia	9.0	12.1	13.8	15.7	19.8	14.8	8.8
Total	47.4	59.0	64.8	63.4	75.6	76.6	67.6
<u>1,000 U.S. dollars</u>							
Processed meat:							
Bulgaria	284	383	--	--	--	102	123
Czechoslovakia	736	443	1,960	2,112	3,787	4,419	4,498
GDR	--	40	106	100	202	61	57
Hungary	7,418	12,475	19,798	20,013	27,248	25,837	25,654
Poland	69,918	105,965	126,993	107,704	136,042	147,026	138,910
Romania	9,930	8,349	12,998	14,756	21,932	25,385	19,511
Yugoslavia	20,758	35,652	44,342	47,738	65,863	49,270	28,714
Total	109,044	163,307	206,197	192,423	255,074	252,100	217,467
Other products:							
Bulgaria	3,361	3,693	10,688	23,414	24,789	23,137	17,317
Czechoslovakia	1,645	1,434	2,004	3,318	2,357	3,307	5,943
GDR	1,003	532	797	1,587	2,648	2,187	2,768
Hungary	2,262	1,198	2,769	3,470	5,028	9,927	4,933
Poland	17,879	12,550	17,225	17,673	18,528	16,943	16,832
Romania	1,820	3,800	3,080	5,784	9,665	8,203	10,959
Yugoslavia	24,813	26,788	32,703	37,951	47,547	37,172	34,919
Total	52,783	49,995	69,266	93,197	110,562	100,876	93,671
Total:							
Bulgaria	3,645	4,076	10,688	23,414	24,789	23,239	17,440
Czechoslovakia	2,381	1,877	3,964	5,430	6,144	7,726	10,441
GDR	1,003	572	903	1,687	2,850	2,248	2,825
Hungary	9,680	13,673	22,567	23,483	32,276	35,764	30,586
Poland	87,797	118,515	144,218	125,377	154,570	163,969	155,743
Romania	11,750	12,149	16,078	20,540	31,597	33,588	30,470
Yugoslavia	45,571	62,440	77,045	85,689	113,410	86,442	63,633
Total	161,827	213,302	275,463	285,620	365,636	352,976	311,138

Source: U.S. Bureau of Census.

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